# BigTow® TRAILERS

BIG TOW QUALITY, BIG TOW DEPENDABILITY.

## Replacement Parts, Service Manual and Operating Instructions

This manual covers
the following models:

**BE-3.5, BE-5A, BE-5, BE-6, BE-7, BE-5BL, BE-6BL, B-3.5P, B-5P, B-6P, B-5, B-6B, B-7, B-8, B-7B, B-9B, BE-5P, BE-6P, B-8PRS, B-9PRS, B-1T, B-1.75T, B-2.5T, B-2.5TSL, B-5T, B-6T, B-7T, B-8T**

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***www.bigtow.com***

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A forward from Big Tow Trailers to our valued customers and dealers.

In this manual you will find service information and replacement parts for your current Big Tow trailer. We have put forth our best effort to provide you with common operations and replacement part information. However, Big Tow Trailers builds many custom trailers for various customers and cannot guarantee that your trailers features are outlined in this manual. If you encounter this problem please contact your dealer. If they cannot be of assistance please feel free to call our Parts Department.

To ensure a more productive call have your trailer's VIN number (serial number) ready as that will be needed to locate your correct replacement parts and answer your technical questions. As a reminder, we do not sell parts directly to you; we only sell parts through our dealer network. The team here at Towmaster Trailers will make every effort to get you back up and running and keep your ownership as trouble free as possible.


Contact Information

Big Tow Trailers
61381 U.S. Hwy 12
Litchfield, MN 55355

800-462-4517 Toll Free
320-693-7921 Company Fax
866-239-2221 Parts Department
www.bigtow.com


Thank you!
Big Tow Trailers

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***Read and understand complete manual before using trailer.***


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# SECTION 1

# Trailer Information

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# Big Tow Trailer Limited Warranty

## Limited Warranty

Manufacturer warranties each new product manufactured by us to be free from defects in material and workmanship for a period of **one year** from date of delivery to the original purchaser. Warranty starts from the date of sale as long we receive the filled-out warranty card. If we do not receive the warranty card, warranty starts from the ship date of the trailer.

Our obligation under this warranty is to replace, free of charge, at our factory or at the dealer's place of business, any part proven defective within the time limit of this warranty.

This warranty does not cover: (1) new products which have been operated in excess of rated capacities, (2) misuse or accidents, (3) vehicles which have been altered, modified or repaired in any manner not authorized by our company, (4) second hand or used vehicle. In no way shall the manufacturer be held liable for consequential damages such as rentals of substitute vehicles, loss of profits or other commercial losses. Further, new vehicle tires are warranted by their respective manufacturers and are not warranted by us.

Manufacturer will handle disposition of warranties on all other purchased components such as axles, suspensions, wheels, and other purchased parts in conjunction with their respective manufacturers, and under the terms of their respective warranty policies.

The manufacturer must receive immediate notification of a defect and no allowance will be made for repairs without manufacturer's prior consent or approval. Manufacturer does not pre-authorize any dealership for warranty work. You must call our warranty service department to receive an authorization number. If the work performed is not preauthorized with a claim number, it may be deemed void. Defective parts must be returned

### Customer Registration Required

**Federal regulations require motor vehicle manufacturers to maintain a record of original owners of their equipment. Our warranty registration fulfills this requirement. Please make**

Manufacturer reserves the right to modify, without notice, specific designs and specifications as deemed advisable on the trailers described herein without obligation in regards to trailers previously sold. The manufacturer also reserves the right to discontinue any model or models without obligation in regards to trailers previously sold. Written warranty covers each

# Payload Ratings

**ALL PAYLOAD RATINGS ARE AT 55+ M.P.H. Trailers are NOT shipped with BRAKE CAB CONTROL equipment. Contact our parts department for information on specialized controllers.**

**All payload ratings are approximate, and will vary slightly with the actual finished trailer weight. Please see detail specifications for exact Gross Vehicle Weight Rating (GVWR). Trailer payload capacity is defined as the GVWR less the actual trailer weight. Please note that this payload capacity is a maximum to not be exceeded, and may only be achieved when the trailer is carefully loaded so that the hitch bears its full rated load.**

**Payload capacity will be reduced if the trailer is loaded such that the hitch bears less than its full rated loading. Care should be taken that moving the load back to reduce hitch weight does not overload the axles and tires. The certification tag on the trailer tongue lists the Gross Axle Weight Rating (GAWR), which is the maximum total weight allowed on the axles/tires. Total axle/tire weight allowed is the GAWR times the number of axles. The tag also lists the GVWR. The required hitch weight at full load is the difference of the GVWR and the sum of the GAWR's.**

**Payload capacity will also be reduced by the addition of any options or changes that increase the trailer weight.**

**When selecting a trailer, always allow a capacity safety margin to account for non-uniform loading, growth in load and accessories weight, and the multitude of other unforeseen circumstances that occur in equipment transportation.**

# Towing Tips and Check List

**Know and follow all state, local, D.O.T., towing and tie down laws that pertain to the load/trailer combination that is to be towed. If you have any questions, contact your local law enforcement or D.O.T. before towing.**

| OK | NO | |
|---|---|---|
| ☐ | ☐ | 1. Check over-all condition of trailer: tie downs, ramps, hitch for proper operation. |
| ☐ | ☐ | 2. Make sure the trailer coupler and towing coupler are the same size and proper capacity. |
| ☐ | ☐ | 3. Back tow vehicle up to trailer, and hook up. Using a "spotter" is the easiest method. |
| ☐ | ☐ | 4. Trailer must be connected to tow vehicle before loading or unloading. |
| ☐ | ☐ | 5. Lock tow vehicle brakes before loading and unloading trailer, and use chock blocks. |
| ☐ | ☐ | 6. After connected to tow vehicle, make sure trailer is level, or slightly higher in front, adjust as needed. |
| ☐ | ☐ | 7. Attach safety chains (cross them), electrical plug and break-a-way switch (electric brakes), and make sure they are not dragging. |
| ☐ | ☐ | 8. Check for proper tire pressure on trailer and tow vehicle. |
| ☐ | ☐ | 9. Check all lighting on trailer and tow vehicle for proper operation. Adjust brake controller (electric brakes) as necessary for proper braking. Make sure running lights are on. |
| ☐ | ☐ | 10. Make sure deck is clear of all debris before loading and before heading out onto the road. |
| ☐ | ☐ | 11. Secure cargo or equipment to trailer, secure load on all 4 corners if possible, do not over-tighten binders. |
| ☐ | ☐ | 12. Secure all loading ramps, deck latches (tilt models) and make sure jack stand is in up position, and stow chock blocks. |
| ☐ | ☐ | 13. After traveling a short distance, stop and check to see if your load is secure, and that all tie downs are tight. |
| ☐ | ☐ | 14. Allow for greater braking distance when pulling a trailer, and generally travel at slower speeds. |

# Reporting Safety Defects

**Big Tow Trailers INC.**
**61381 U.S. Hwy 12**
**Litchfield, MN 55355**

**Reporting Safety Defects:**

**If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Big Tow, Inc.**

**If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Towmaster, Inc.**

**To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, DC area) or write to:**

**NHTSA**
**U.S. Department of Transportation**
**400 7th Street SW NSA-11**
**Washington, DC 20590.**

**You may also obtain other information about motor vehicle safety from the http://www.safecar.gov.**

# Maintenance and Operating Instructions

**TIRES:** Check daily, and maintain proper inflation. Refer to Tire Chart.

**WHEEL NUTS:** Check weekly, and maintain proper torque.

**WHEEL BEARINGS:** Check bearings every 3000 miles. Grease if necessary. Check for overheating and excessive wear when operating in severe conditions, i.e. deep mud, sand or water and also when a hub is pulled for any reason.

**WHEEL BEARINGS/LUBRICATION:** Check oil level of wheel bearings daily. Where severe operating conditions such as deep mud, sand, or water, etc. are encountered, bearings should be checked for over-heating or excessive wear and also when a hub is pulled for any reason. Fill hub with SAE 90 oil to indicated level on hub cap.

**BATTERY:** Keep battery charged! To ensure proper break-a-way protection, check battery regularly for proper charge.

**ELECTRICAL PLUG:** Check trailer plug and truck receptacle for damage and/or corrosion, and that they fit tight.

**LIGHTS/WIRING:** Inspect all lights for proper operation daily and replace as necessary. Connect power source, preferably tow vehicle to trailer, and check all lights for proper operation and possible loose connections, or improper wiring between tow vehicle and trailer.

**PARKING JACK:** Check jack for any physical damage or improper operation due to corrosion. Replace if severely damaged or rusted. Check bolts for tightness daily and be sure the lock washers and/or lock nuts are used.

**TIE DOWN RINGS:** Check daily for physical damage to "D" ring, clips, or welds and replace or repair immediately.

**SUSPENSION BOLTS:** After an initial break-in period of 150 miles and periodically thereafter every 1000 miles, all bolts and nuts should be rechecked for proper torque. Check eye bushings in springs for wear and replace any part if wear shows.

**DECK CUSHION CYLINDER:** Use "ATF" oil or equivalent. (Tilt models only.)

**COUPLER/TOW RING:** Inspect visually: if coupler shows excessive wear, it should be replaced.

**TOW RING:** Inspect for tightness daily before use. Ring plate must be tight against hitch plate to prevent plate deformation. If ring shows excessive wear, it should be replaced immediately. Double nut bottom bolts. (4 bolt pintle ring.)

## TOW RING INSTALLATION

1. Determine proper tow ring height according to tow vehicle.
2. Install tow ring with secondary support bolt in lower position whenever possible.
3. Tighten nuts on both bolts until lock washers are fully compressed.
4. Do not use tow ring with a hitch which is excessively loose or that binds when trailer turns.
5. Double nut lower bolts.

**BRAKE CONTROLLER:** Check controller daily for proper operation both automatic with tow vehicle foot pedal and manually. Replace if defective or damaged. Adjust for proper braking effect for load being towed. Trailer braking should be adjusted so that trailer brakes react and apply at the same time as tow vehicle brakes come on, never after tow vehicle brakes.

**MAGNETS:** Check at any indication of braking problems, at brake replacement, at bearing inspection, or any time a hub is pulled. Magnets should be replaced if bare wire is showing at wear surface, surface of magnet is gouged, scored, or magnet is worn unevenly.

**BRAKE CLEANING/INSPECTION:** Your trailer brakes must be inspected and serviced at yearly intervals or more often as use and performance requires. Magnets and shoes must be changed when they become worn or scored thereby preventing adequate vehicle braking. Clean the backing plate, magnet arm, magnet, and brake shoes. Make certain that all the parts removed are replaced in the same brake and drum assembly. Inspect the magnet arm for any loose or worn parts. Check shoe return springs, hold down springs, and adjuster springs for stretch or deformation and replace if required. **ASBESTOS DUST HAZARD!** Since some brake shoe friction materials contain asbestos, certain precautions need to be taken when servicing brakes: (1) Avoid creating or breathing dust. (2) Avoid machining, filing or grinding the brake linings. (3) Do not use compressed air or dry brushing for cleaning. (Dust can be removed with a damp brush.)

**BRAKE ADJUSTMENT:** Brakes should be adjusted (1) after the first 200 miles of operation when the brake shoes and drums have "seated," (2) at 3000 mile intervals, (3) or as use and performance requires. The brakes should be adjusted in the following manner:

1. Jack up trailer and secure on adequate capacity jack stands. Do not lift or place supports on any part of the suspension system. Check that the wheel and drum rotate freely.
2. Remove the adjusting hole cover from the adjusting slot on the bottom of the brake backing plate.
3. With a screwdriver or standard adjusting tool, rotate the starwheel of the adjuster assembly to expand the brake shoes. Adjust the brake shoes out until the pressure of the linings against the drum makes the wheel very difficult to turn. (With drop spindle axles, a modified adjusting tool with about an 80 degree angle should be used.)
4. Rotate the starwheel in the opposite direction until the wheel turns freely with a slight lining drag.
5. Replace the adjusting hole cover and lower the wheel to the ground. Repeat the above procedure on all brakes.

A "green brake" is an unground, unburnished brake. Normal manufacturing tolerances dictate that there is a break-in period required after which the lining will seat into a perfect concentric situation. During this break-in period, the user must be aware that additional brake adjustments will be mandatory to achieve optimum braking performance.

# ! WARNINGS !

! Be sure trailer is connected to tow vehicle when loading and unloading machinery.

! Lock tow vehicle brakes **BEFORE** loading and unloading.

! Use wheel chocks when loading or unloading trailer.

! Check tire inflation daily. See tire chart.

! Check wheel nuts weekly - maintain proper torque.

! Check master cylinder fluid level weekly. (Hyd. brakes)

! Trailer should be level when fully loaded. If trailer is low in front when loaded, adjust coupler to make level (or slightly higher in front).

! Use caution when trailer is being loaded or unloaded. **DO NOT** place hands or feet under ramps when raising or lowering.

# General

**A recent law was enacted that requires trailer manufacturers to place a tire and loading information decal placed near the serial tag on a trailer as well as detailed information on loading and tires in the owner's manual on all trailers with a GVWR (Gross Vehicle Weight Rating) of 10,000 lbs. or less. This section of our manual covers the required information.**

# Tire and Safety Information

**This portion of the User's Manual contains tire safety information as required by 49 CFR 575.6.**

**Section 1.1** contains "Steps for Determining Correct Load Limit - Trailer".
**Section 1.2** contains "Steps for Determining Correct Load Limit – Tow Vehicle".
**Section 1.3** contains a Glossary of Tire Terminology, including "cold inflation pressure", "maximum inflation pressure", "recommended inflation pressure", and other non-technical terms.
**Section 1.4** contains information from the NHTSA brochure entitled "Tire Safety – Everything Rides On It".
This brochure, as well as the preceding subsections, describes the following items;

Tire labeling, including a description and explanation of each marking on the tires, and information about the DOT Tire Identification Number (TIN).

Recommended tire inflation pressure, including a description and explanation of:

A. Cold inflation pressure.

B. Vehicle Placard and location on the vehicle.

C. Adverse safety consequences of under inflation (including tire failure).

D. Measuring and adjusting air pressure for proper inflation.

E. Tire Care, including maintenance and safety practices.

Vehicle load limits, including a description and explanation of the following items:

A. Locating and understanding the load limit information, total load capacity, and cargo capacity.

B. Calculating total and cargo capacities with varying seating configurations including quantitative examples showing / illustrating how the vehicles cargo and luggage capacity decreases as combined number and size of occupants' increases. This item is also discussed in Section 3.

C. Determining compatibility of tire and vehicle load capabilities.

D. Adverse safety consequences of overloading on handling and stopping on tires.

### 1.1. Steps for Determining Correct Load Limit – Trailer

Determining the load limits of a trailer includes more than understanding the load limits of the tires alone. On all trailers there is a Federal certification/VIN label that is located on the forward half of the left (road) side of the unit. This certification/VIN label will indicate the trailer's Gross Vehicle Weight Rating (GVWR). This is the most weight the fully loaded trailer can weigh. It will also provide the Gross Axle Weight Rating (GAWR). This is the most a particular axle can weigh. If there are multiple axles, the GAWR of each axle will be provided.

If your trailer has a GVWR of 10,000 pounds or less, there is a vehicle placard located in the same location as the certification label described above. This placard provides tire and loading information. In addition, this placard will show a statement regarding maximum cargo capacity. Cargo can be added to the trailer, up to the maximum weight specified on the placard. The combined weight of the cargo is provided as a single number. In any case, remember: the total weight of a fully loaded trailer can not exceed the stated GVWR.

# Tire and Safety Information - Continued

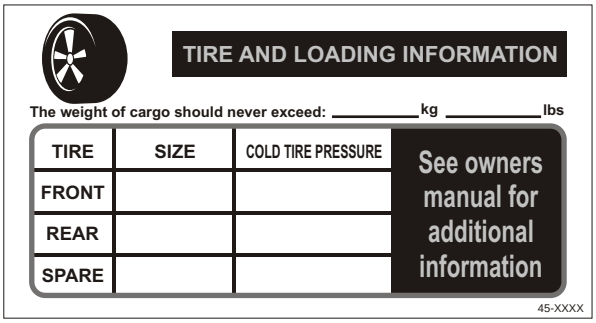
**1.1. Steps for Determining Correct Load Limit – Trailer (continued)**

For trailers with living quarters installed, the weight of water and propane also need to be considered. The weight of fully filled propane containers is considered part of the weight of the trailer before it is loaded with cargo, and is not considered part of the disposable cargo load. Water however, is a disposable cargo weight and is treated as such. If there is a fresh water storage tank of 100 gallons, this tank when filled would weigh about 800 pounds. If more cargo is being transported, water can be off-loaded to keep the total amount of cargo added to the vehicle within the limits of the GVWR so as not to overload the vehicle. Understanding this flexibility will allow you, the owner, to make choices that fit your travel needs.

When loading your cargo, be sure it is distributed evenly to prevent overloading front to back and side to side. Heavy items should be placed low and as close to the axle positions as reasonable. Too many items on one side may overload a tire. The best way to know the actual weight of the vehicle is to weigh it at a public scale. Talk to your dealer to discuss the weighing methods needed to capture the various weights related to the trailer. This would include the weight empty or unloaded, weights per axle, wheel, hitch or king-pin, and total weight.

Excessive loads and/or underinflation cause tire overloading and, as a result, abnormal tire flexing occurs. This situation can generate an excessive amount of heat within the tire. Excessive heat may lead to tire failure. It is the air pressure that enables a tire to support the load, so proper inflation is critical. The proper air pressure may be found on the certification/VIN label and/or on the Tire Placard. This value should never exceed the maximum cold inflation pressure stamped on the tire.

**1.1.1. Trailers 10,000 Pounds GVWR or Less**




1. Locate the statement, “The weight of cargo should never exceed XXX kg or XXX lbs.,” on your vehicle’s placard. See figure 1-1.

2. This figure equals the available amount of cargo and luggage load capacity.

3. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity.

The trailer’s placard refers to the Tire Information Placard attached adjacent to or near the trailer’s VIN (Certification) label at the left front of the trailer.

**1.1.2. Trailers Over 10,000 Pounds GVWR (Note: These trailers are not required to have a tire information placard on the vehicle)**

1. Determine the empty weight of your trailer by weighing the trailer using a public scale or other means. This step does not have to be repeated.

2. Locate the GVWR (Gross Vehicle Weight Rating) of the trailer on your trailer’s VIN (Certification) label.

3. Subtract the empty weight of your trailer from the GVWR stated on the VIN label. That weight is the maximum available cargo capacity of the trailer and may not be safely exceeded.

# Tire and Safety Information - Continued

**1.2. Steps for Determining Correct Load Limit – Tow Vehicle**

1. Locate the statement, “The combined weight of occupants and cargo should never exceed XXX lbs.,” on your vehicle’s placard.

2. Determine the combined weight of the driver and passengers who will be riding in your vehicle.

3. Subtract the combined weight of the driver and passengers from XXX kilograms or XXX pounds.

4. The resulting figure equals the available amount of cargo and luggage capacity. For example, if the “XXX” amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage capacity is 650 lbs. (1400-750 (5 x 150) = 650 lbs.).

5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage capacity calculated in Step # 4.

6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult the tow vehicle’s manual to determine how this weight transfer reduces the available cargo and luggage capacity of your vehicle.

**1.3. Glossary Of Tire Terminology**

**Accessory weight**
The combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes, power windows, power seats, radio and heater, to the extent that these items are available as factory-installed equipment (whether installed or not).

**Bead**
The part of the tire that is made of steel wires, wrapped or reinforced by ply cords and that is shaped to fit the rim.

**Bead separation**
This is the breakdown of the bond between components in the bead.

**Bias ply tire**
A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the centerline of the tread.

**Carcass**
The tire structure, except tread and sidewall rubber which, when inflated, bears the load.

**Chunking**
The breaking away of pieces of the tread or sidewall.

**Cold inflation pressure**
The pressure in the tire before you drive.

**Cord**
The strands forming the plies in the tire.

**Cord separation**
The parting of cords from adjacent rubber compounds.

**Cracking**
Any parting within the tread, sidewall, or inner liner of the tire extending to cord material.

**CT**
A pneumatic tire with an inverted flange tire and rim system in which the rim is designed with rim flanges pointed radially inward and the tire is designed to fit on the underside of the rim in a manner that encloses the rim flanges inside the air cavity of the tire.

# Tire and Safety Information - Continued

**Curb weight**
The weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, and coolant, and, if so equipped, air conditioning and additional weight optional engine.

**Extra load tire**
A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

**Groove**
The space between two adjacent tread ribs.

**Gross Axle Weight Rating**
The maximum weight that any axle can support, as published on the Certification / VIN label on the front left side of the trailer. Actual weight determined by weighing each axle on a public scale, with the trailer attached to the towing vehicle.

**Gross Vehicle Weight Rating**
The maximum weight of the fully loaded trailer, as published on the Certification / VIN label. Actual weight determined by weighing trailer on a public scale, without being attached to the towing vehicle.

**Hitch Weight**
The downward force exerted on the hitch ball by the trailer coupler.

**Innerliner**
The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire.

**Innerliner separation**
The parting of the innerliner from cord material in the carcass.

**Intended outboard sidewall**
The sidewall that contains a white-wall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire or the outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle.

**Light truck (LT) tire**
A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.

**Load rating**
The maximum load that a tire is rated to carry for a given inflation pressure.

**Maximum load rating**
The load rating for a tire at the maximum permissible inflation pressure for that tire.

**Maximum permissible inflation pressure**
The maximum cold inflation pressure to which a tire may be inflated.

**Maximum loaded vehicle weight**
The sum of curb weight, accessory weight, vehicle capacity weight, and production options weight.

**Measuring rim**
The rim on which a tire is fitted for physical dimension requirements.

**Pin Weight**
The downward force applied to the 5th wheel or gooseneck ball, by the trailer kingpin or gooseneck coupler.

**Non-pneumatic rim**
A mechanical device which, when a non-pneumatic tire assembly incorporates a wheel, supports the tire, and attaches, either integrally or separably, to the wheel center member and upon which the tire is attached.

**Non-pneumatic spare tire assembly**
A non-pneumatic tire assembly intended for temporary use in place of one of the pneumatic tires and rims that are fitted to a passenger car in compliance with the requirements of this standard.

# Tire and Safety Information - Continued

**Non-pneumatic tire**
A mechanical device which transmits, either directly or through a wheel or wheel center member, the vertical load and tractive forces from the roadway to the vehicle, generates the tractive forces that provide the directional control of the vehicle and does not rely on the containment of any gas or fluid for providing those functions.

**Non-pneumatic tire assembly**
A non-pneumatic tire, alone or in combination with a wheel or wheel center member, which can be mounted on a vehicle.

**Normal occupant weight**
This means 68 kilograms (150 lbs.) times the number of occupants specified in the second column of Table I of 49 CFR 571.110.

**Occupant distribution**
The distribution of occupants in a vehicle as specified in the third column of Table I of 49 CFR 571.110.

**Open splice**
Any parting at any junction of tread, sidewall, or innerliner that extends to cord material.

**Outer diameter**
The overall diameter of an inflated new tire.

**Overall width**
The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs.

**Ply**
A layer of rubber-coated parallel cords.

**Ply separation**
A parting of rubber compound between adjacent plies.

**Pneumatic tire**
A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

**Production options weight**
The combined weight of those installed regular production options weighing over 2.3 kilograms (5 lbs.) in excess of those standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim.

**Radial ply tire**
A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the centerline of the tread.

**Recommended inflation pressure**
This is the inflation pressure provided by the vehicle manufacturer on the Tire Information label and on the Certification / VIN tag.

**Reinforced tire**
A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

**Rim**
A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

**Rim diameter**
This means the nominal diameter of the bead seat.

**Rim size designation**
This means the rim diameter and width.

# Tire and Safety Information - Continued

**Rim type designation**
This means the industry of manufacturer's designation for a rim by style or code.

**Rim width**
This means the nominal distance between rim flanges.

**Section width**
The linear distance between the exteriors of the sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands.

**Sidewall**
That portion of a tire between the tread and bead.

**Sidewall separation**
The parting of the rubber compound from the cord material in the sidewall.

**Special Trailer (ST) tire**
The "ST" is an indication the tire is for trailer use only.

**Test rim**
The rim on which a tire is fitted for testing, and may be any rim listed as appropriate for use with that tire.

**Tread**
That portion of a tire that comes into contact with the road.

**Tread rib**
A tread section running circumferentially around a tire.

**Tread separation**
Pulling away of the tread from the tire carcass.

**Treadwear indicators (TWI)**
The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread.

**Vehicle capacity weight**
The rated cargo and luggage load plus 68 kilograms (150 lbs.) times the vehicle's designated seating capacity.

**Vehicle maximum load on the tire**
The load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two.

**Vehicle normal load on the tire**
The load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table I of CRF 49 571.110) and dividing by 2.

**Weather side**
The surface area of the rim not covered by the inflated tire.

**Wheel center member**
In the case of a non-pneumatic tire assembly incorporating a wheel, a mechanical device which attaches, either integrally or separably, to the non-pneumatic rim and provides the connection between the non-pneumatic rim and the vehicle; or, in the case of a non-pneumatic tire assembly not incorporating a wheel, a mechanical device which attaches, either integrally or separably, to the non-pneumatic tire and provides the connection between tire and the vehicle.

**Wheel-holding fixture**
The fixture used to hold the wheel and tire assembly securely during testing.

# Tire and Safety Information - Continued

**1.4. Tire Safety - Everything Rides On It**

The National Traffic Safety Administration (NHTSA) has published a brochure (DOT HS 809 361) that discusses all aspects of Tire Safety, as required by CFR 575.6. This brochure is reproduced in part below. It can be obtained and downloaded from NHTSA, free of charge, from the following web site:

http://www.nhtsa.dot.gov/cars/rules/TireSafety/ridesonit/tires_index.html

Studies of tire safety show that maintaining proper tire pressure, observing tire and vehicle load limits (not carrying more weight in your vehicle than your tires or vehicle can safely handle), avoiding road hazards, and inspecting tires for cuts, slashes, and other irregularities are the most important things you can do to avoid tire failure, such as tread separation or blowout and flat tires. These actions, along with other care and maintenance activities, can also:

- Improve vehicle handling
- Help protect you and others from avoidable breakdowns and accidents
- Improve fuel economy
- Increase the life of your tires.

This area presents a comprehensive overview of tire safety, including information on the following topics:

- Basic tire maintenance
- Uniform Tire Quality Grading System
- Fundamental characteristics of tires
- Tire safety tips.

Use this information to make tire safety a regular part of your vehicle maintenance routine. Recognize that the time you spend is minimal compared with the inconvenience and safety consequences of a flat tire or other tire failure.

**1.5. Safety First–Basic Tire Maintenance**

Properly maintained tires improve the steering, stopping, traction, and load-carrying capability of your vehicle. Underinflated tires and overloaded vehicles are a major cause of tire failure. Therefore, as mentioned above, to avoid flat tires and other types of tire failure, you should maintain proper tire pressure, observe tire and vehicle load limits, avoid road hazards, and regularly inspect your tires.

**1.5.1. Finding Your Vehicle's Recommended Tire Pressure and Load Limits**

Tire information placards and vehicle certification labels contain information on tires and load limits. These labels indicate the vehicle manufacturer's information including:

- Recommended tire size
- Recommended tire inflation pressure
- Vehicle capacity weight (VCW–the maximum occupant and cargo weight a vehicle is designed to carry)
- Front and rear gross axle weight ratings (GAWR– the maximum weight the axle systems are designed to carry).

Both placards and certification labels are permanently attached to the trailer near the left front.

**1.5.2. Understanding Tire Pressure and Load Limits**

Tire inflation pressure is the level of air in the tire that provides it with load-carrying capacity and affects the overall performance of the vehicle. The tire inflation pressure is a number that indicates the amount of air pressure– measured in pounds per square inch (psi)–a tire requires to be properly inflated. (You will also find this number on the vehicle information placard expressed in kilopascals (kpa), which is the metric measure used internationally.)

# Tire and Safety Information - Continued

Manufacturers of passenger vehicles and light trucks determine this number based on the vehicle's design load limit, that is, the greatest amount of weight a vehicle can safely carry and the vehicle's tire size. The proper tire pressure for your vehicle is referred to as the "recommended cold inflation pressure." (As you will read below, it is difficult to obtain the recommended tire pressure if your tires are not cold.)

Because tires are designed to be used on more than one type of vehicle, tire manufacturers list the "maximum permissible inflation pressure" on the tire sidewall. This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

**1.5.3. Checking Tire Pressure**

It is important to check your vehicle's tire pressure at least once a month for the following reasons:

- Most tires may naturally lose air over time.
- Tires can lose air suddenly if you drive over a pothole or other object or if you strike the curb when parking.
- With radial tires, it is usually not possible to determine underinflation by visual inspection.

For convenience, purchase a tire pressure gauge to keep in your vehicle. Gauges can be purchased at tire dealerships, auto supply stores, and other retail outlets.

The recommended tire inflation pressure that vehicle manufacturers provide reflects the proper psi when a tire is cold.

The term cold does not relate to the outside temperature. Rather, a cold tire is one that has not been driven on for at least three hours. When you drive, your tires get warmer, causing the air pressure within them to increase. Therefore, to get an accurate tire pressure reading, you must measure tire pressure when the tires are cold or compensate for the extra pressure in warm tires.

**1.5.4. Steps for Maintaining Proper Tire Pressure**

**Step 1:** Locate the recommended tire pressure on the vehicle's tire information placard, certification label, or in the owner's manual.

**Step 2:** Record the tire pressure of all tires.

**Step 3:** If the tire pressure is too high in any of the tires, slowly release air by gently pressing on the tire valve stem with the edge of your tire gauge until you get to the correct pressure.

**Step 4:** If the tire pressure is too low, note the difference between the measured tire pressure and the correct tire pressure. These "missing" pounds of pressure are what you will need to add.

**Step 5:** At a service station, add the missing pounds of air pressure to each tire that is underinflated.

**Step 6:** Check all the tires to make sure they have the same air pressure (except in cases in which the front and rear tires are supposed to have different amounts of pressure).

If you have been driving your vehicle and think that a tire is underinflated, fill it to the recommended cold inflation pressure indicated on your vehicle's tire information placard or certification label. While your tire may still be slightly underinflated due to the extra pounds of pressure in the warm tire, it is safer to drive with air pressure that is slightly lower than the vehicle manufacturer's recommended cold inflation pressure than to drive with a significantly underinflated tire. Since this is a temporary fix, don't forget to recheck and adjust the tire's pressure when you can obtain a cold reading.

**1.5.5. Tire Size**

To maintain tire safety, purchase new tires that are the same size as the vehicle's original tires or another size recommended by the manufacturer. Look at the tire information placard, the owner's manual, or the sidewall of the tire you are replacing to find this information. If you have any doubt about the correct size to choose, consult with the tire dealer.

# Tire and Safety Information - Continued

**1.5.6. Tire Tread**

The tire tread provides the gripping action and traction that prevent your vehicle from slipping or sliding, especially when the road is wet or icy. In general, tires are not safe and should be replaced when the tread is worn down to 1/16 of an inch. Tires have built-in treadwear indicators that let you know when it is time to replace your tires. These indicators are raised sections spaced intermittently in the bottom of the tread grooves. When they appear "even" with the outside of the tread, it is time to replace your tires. Another method for checking tread depth is to place a penny in the tread with Lincoln's head upside down and facing you. If you can see the top of Lincoln's head, you are ready for new tires.

**1.5.7. Tire Balance and Wheel Alignment**

To avoid vibration or shaking of the vehicle when a tire rotates, the tire must be properly balanced. This balance is achieved by positioning weights on the wheel to counterbalance heavy spots on the wheel-and-tire assembly. A wheel alignment adjusts the angles of the wheels so that they are positioned correctly relative to the vehicle's frame. This adjustment maximizes the life of your tires. These adjustments require special equipment and should be performed by a qualified technician.

**1.5.8. Tire Repair**

The proper repair of a punctured tire requires a plug for the hole and a patch for the area inside the tire that surrounds the puncture hole. Punctures through the tread can be repaired if they are not too large, but punctures to the sidewall should not be repaired. Tires must be removed from the rim to be properly inspected before being plugged and patched.

**1.5.9. Tire Fundamentals**

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a tire identification number for safety standard certification and in case of a recall.

**1.5.9.1. Information on Passenger Vehicle Tires**

**P**
The "P" indicates the tire is for passenger vehicles.

**Next number**
This three-digit number gives the width in millimeters of the tire from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

**Next number**
This two-digit number, known as the aspect ratio, gives the tire's ratio of height to width. Numbers of 70 or lower indicate a short sidewall for improved steering response and better overall handling on dry pavement.

**R**
The "R" stands for radial. Radial ply construction of tires has been the industry standard for the past 20 years.

**Next number**
This two-digit number is the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

**Next number**
This two- or three-digit number is the tire's load index. It is a measurement of how much weight each tire can support. You may find this information in your owner's manual. If not, contact a local tire dealer. Note: You may not find this information on all tires because it is not required by law.

**M+S**
The "M+S" or "M/S" indicates that the tire has some mud and snow capability. Most radial tires have these markings; hence, they have some mud and snow capability.

# Tire and Safety Information - Continued

**Speed Rating**

The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time. The ratings range from 99 miles per hour (mph) to 186 mph. These ratings are listed below. Note: You may not find this information on all tires because it is not required by law.

| Letter Rating | Speed Rating |
|---|---|
| Q | 99 mph |
| R | 106 mph |
| S | 112 mph |
| T | 118 mph |
| U | 124 mph |
| H | 130 mph |
| V | 149 mph |
| W | 168* mph |
| Y | 186* mph |

* For tires with a maximum speed capability over 149 mph, tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph, tire manufacturers always use the letters ZR.

**U.S. DOT Tire Identification Number**
This begins with the letters "DOT" and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code where it was manufactured, and the last four numbers represent the week and year the tire was built. For example, the numbers 3197 means the 31st week of 1997. The other numbers are marketing codes used at the manufacturer's discretion. This information is used to contact consumers if a tire defect requires a recall.

**Tire Ply Composition and Materials Used**
The number of plies indicates the number of layers of rubber-coated fabric in the tire. In general, the greater the number of plies, the more weight a tire can support. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others.

**Maximum Load Rating**
This number indicates the maximum load in kilograms and pounds that can be carried by the tire.

**Maximum Permissible Inflation Pressure**
This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

**1.5.9.2. UTQGS Information**

**Treadwear Number**
This number indicates the tire's wear rate. The higher the treadwear number is, the longer it should take for the tread to wear down. For example, a tire graded 400 should last twice as long as a tire graded 200.

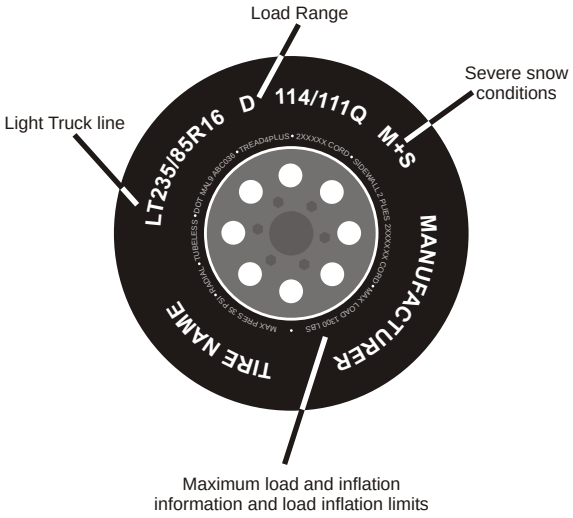
**Traction Letter**
This letter indicates a tire's ability to stop on wet pavement. A higher graded tire should allow you to stop your car on wet roads in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as "AA","A", "B", and "C".

**Temperature Letter**
This letter indicates a tire's resistance to heat. The temperature grade is for a tire that is inflated properly and not overloaded. Excessive speed, underinflation or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure. From highest to lowest, a tire's resistance to heat is graded as "A", "B", or "C".

# Tire and Safety Information - Continued

**1.5.9.3. Additional Information on Light Truck Tires**

Please refer to the following diagram.




Tires for light trucks have other markings besides those found on the sidewalls of passenger tires.

**LT**
The "LT" indicates the tire is for light trucks or trailers.

**ST**
An "ST" is an indication the tire is for trailer use only.

**Max. Load Dual kg (lbs) at kPa (psi) Cold**
This information indicates the maximum load and tire pressure when the tire is used as a dual, that is, when four tires are put on each rear axle (a total of six or more tires on the vehicle).

**Max. Load Single kg (lbs) at kPa (psi) Cold**
This information indicates the maximum load and tire pressure when the tire is used as a single.

**Load Range**
This information identifies the tire's load-carrying capabilities and its inflation limits.

**1.6. Tire Safety Tips**

**Preventing Tire Damage**

- Slow down if you have to go over a pothole or other object in the road.
- Do not run over curbs or other foreign objects in the roadway, and try not to strike the curb when parking.

**Tire Safety Checklist**

- Check tire pressure regularly (at least once a month), including the spare.
- Inspect tires for uneven wear patterns on the tread, cracks, foreign objects, or other signs of wear or trauma.
- Remove bits of glass and foreign objects wedged in the tread.
- Make sure your tire valves have valve caps.
- Check tire pressure before going on a long trip.
- Do not overload your vehicle. Check the Tire Information and Loading Placard or User's Manual for the maximum recommended load for the vehicle.

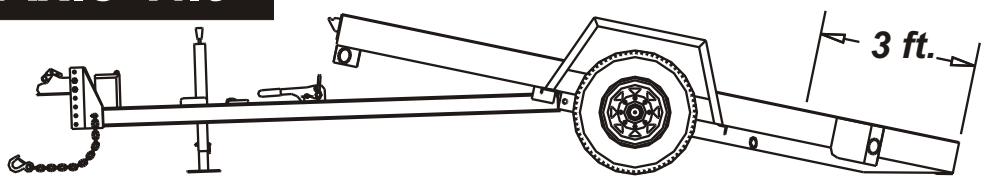
**More information may be found at http://www.natm.com.**

# Tilt Loading Instructions

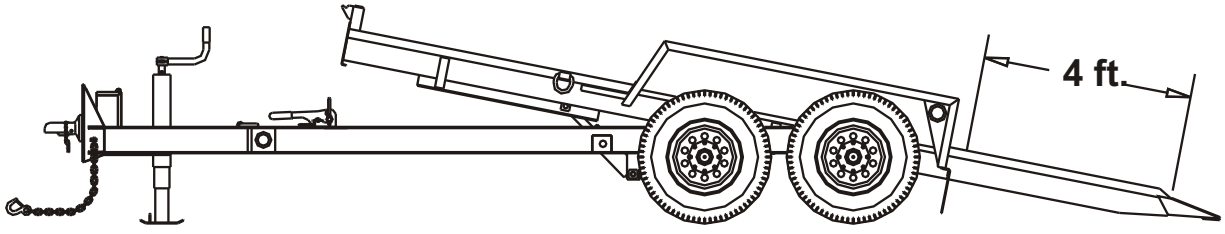
**This decal, p/n 455108 is located on the left side of your trailer. This decal says that *after* loading your trailer, the equipment or load being transported shall not be behind this point. Equipment or load being transported on models with single axle shall be a minimum of 3 feet from rear of deck and a minimum of 4 feet from rear of deck on models with tandem axles.**

**Decal p/n 455109 is located on the top of the left fender of your trailer (models B-1T, B-1.75T, B-2.5T, B-5T, B-6T, and B-7T only)**

## Single Axle Tilt




## Tandem Axle Tilt

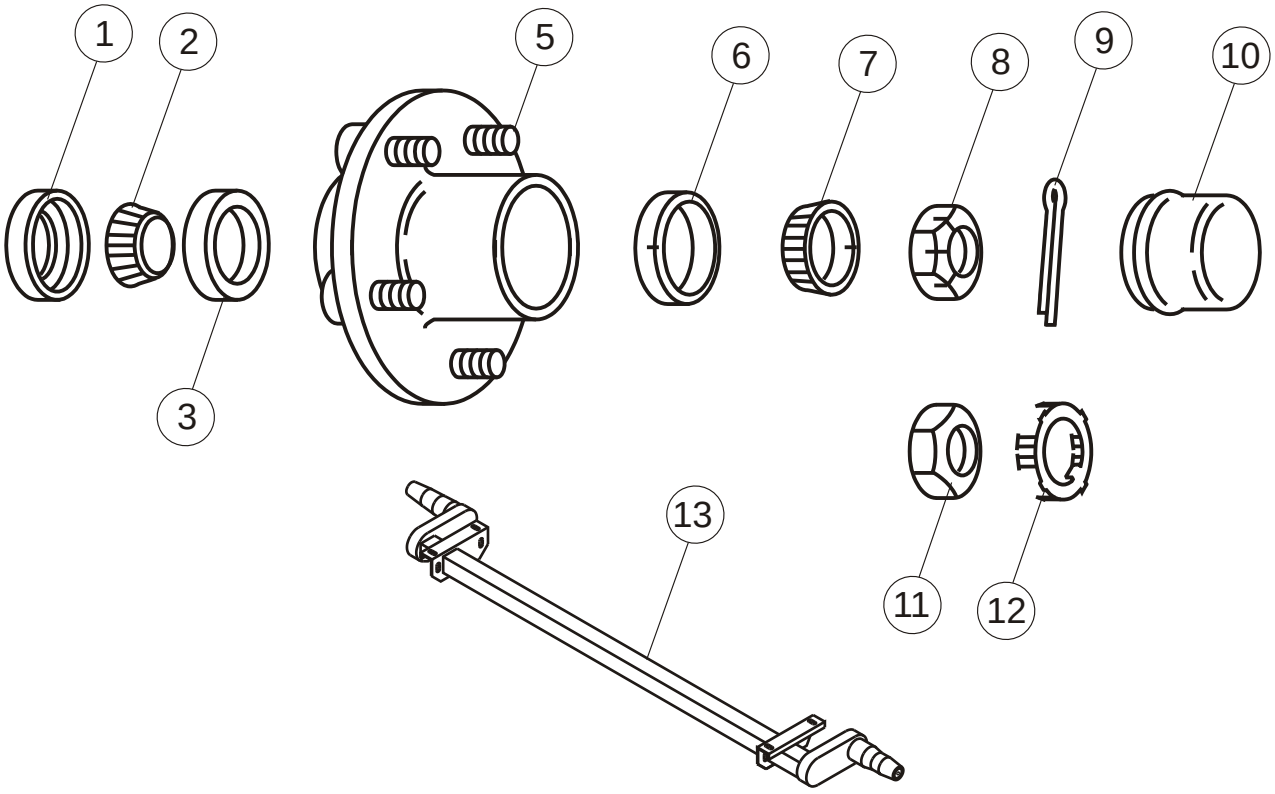


# SECTION 2

# Axle Parts

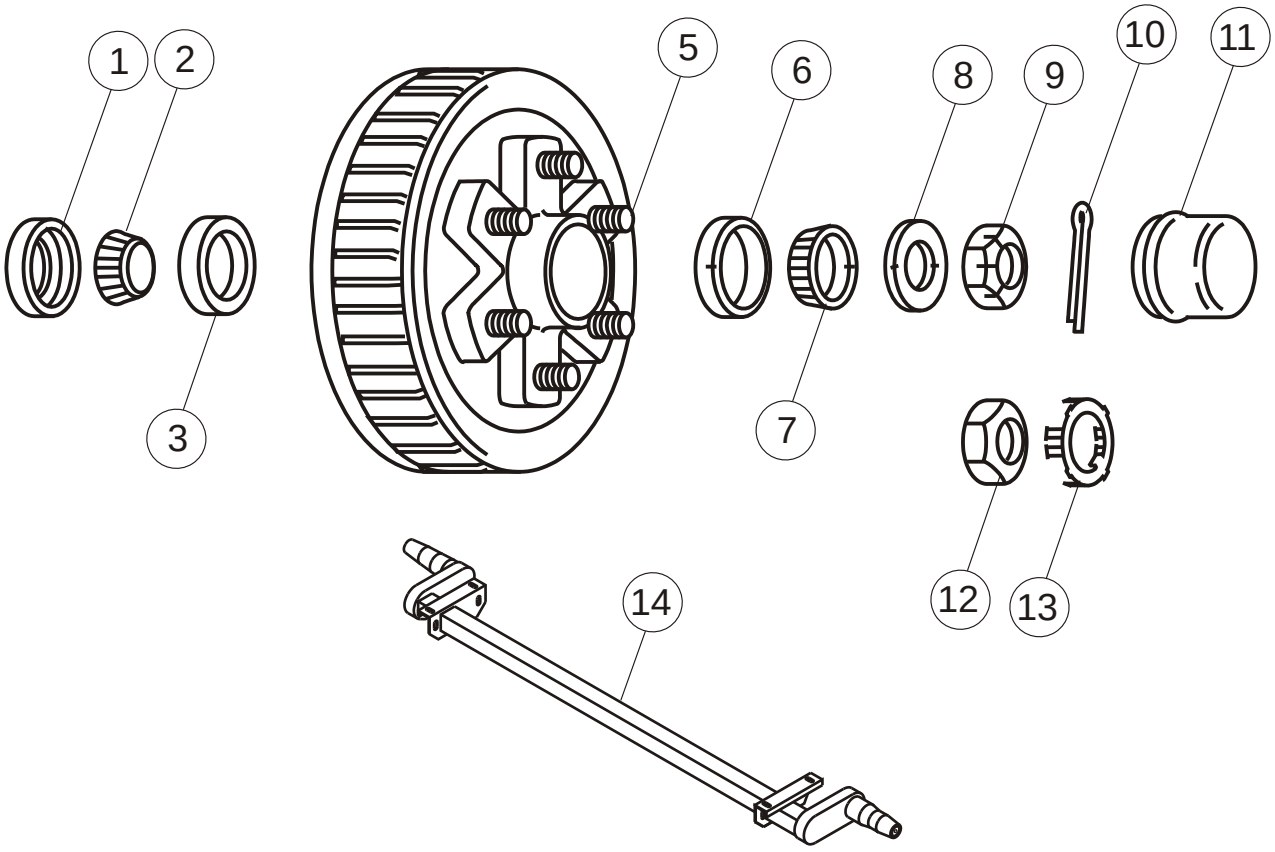

| | |
|---|---|
| 2.2K Hub and Axle | 2.1 |
| 3.5K Hub, Drum and Axke (non-E-Z lube) | 2.2 |
| 3.5K Hub, Drum and Axles (E-Z Lube) | 2.3 |
| 6K and 7K Hub, Drum and Axles (non E-Z lube) | 2.4 |
| 6K Hub, Drum and Axles (E-Z lube) | 2.5 |
| 7.2K Hub, Drum and Axle | 2.6 |
| 8K Hub, Drum and Axles | 2.8 |
| 9K, 10K Generall Duty Hub and Drum | 2.9 |
| 3.5K Electric Brake | 2.10 |
| 3.5K Hydraulic Brake | 2.11 |
| 6K, 7K Electric Brake | 2.12 |
| 6K Hydraulic Brake | 2.13 |
| 7.2K Electric Brake | 2.14 |
| 8K Electric Brake | 2.15 |
| 9K, 10K General Duty Electric Brake | 2.16 |
| Tires and Wheels | 2.17 |

# 2.2K Hub and Axle




| Item | Part # | Description |
|---|---|---|
| | 25-7258 | complete hub assembly, 6 1/2" hub flange |
| | | |
| 1 | 25-7271 | grease seal, 1.987" o.d., 1.50" i.d. |
| 2 | 25-3520 | inner/outer bearing |
| 3 | 25-3518 | inner/outer race |
| | | |
| 5 | 25-7273 | screw-in stud, 1/2" dia. |
| 6 | 25-3518 | inner/outer race |
| 7 | 25-3520 | inner/outer bearing |
| 8 | 25-3524 | spindle nut |
| 9 | 25-6016 | cotter pin |
| 10 | 25-3526 | grease cap, drive-in (1.986" o.d.) |
| 11 | 25-1526 | jam nut |
| 12 | 25-1524 | nut retainer |
| 13 | 25-7275 | axle (less hubs) |
| | | |
| | 23-0070 | complete axle assembly (not shown) |
| | | |
| | 37-0701 | 1/2" cone wheel nut (not shown) |

# 3.5K Hub, Drum and Axle (non E-Z lube)




| Item | Part # | Description |
|---|---|---|
| | 25-3500 | complete hub/drum assembly |
| | | |
| 1 | 25-0002 | grease seal |
| 2 | 25-3510 | inner bearing cone |
| 3 | 25-3512 | inner race |
| | | |
| 5 | 25-6161 | 1/2" drive-in stud |
| 6 | 25-3518 | outer race |
| 7 | 25-3520 | outer bearing cone |
| 8 | 25-3522 | spindle washer |
| 9 | 25-3524 | spindle nut |
| 10 | 25-6016 | cotter pin |
| 11 | 25-3526 | grease cap |
| 12 | 25-1526 | jam nut |
| 13 | 25-1524 | nut retainer |
| 14 | 25-0011 | axle only, 3,500 lb. Torflex, less hubs/drums |
| | | |
| | 37-0701 | 1/2" cone wheel nut (not shown) |
| | | |
| | | Complete axles... |
| | 23-0001 | axle, 3.5k, electric |
| | 23-0011 | axle, 3.5k, hydraulic |
| | 23-0011F | axle, 3.5k, hydraulic, free backing |
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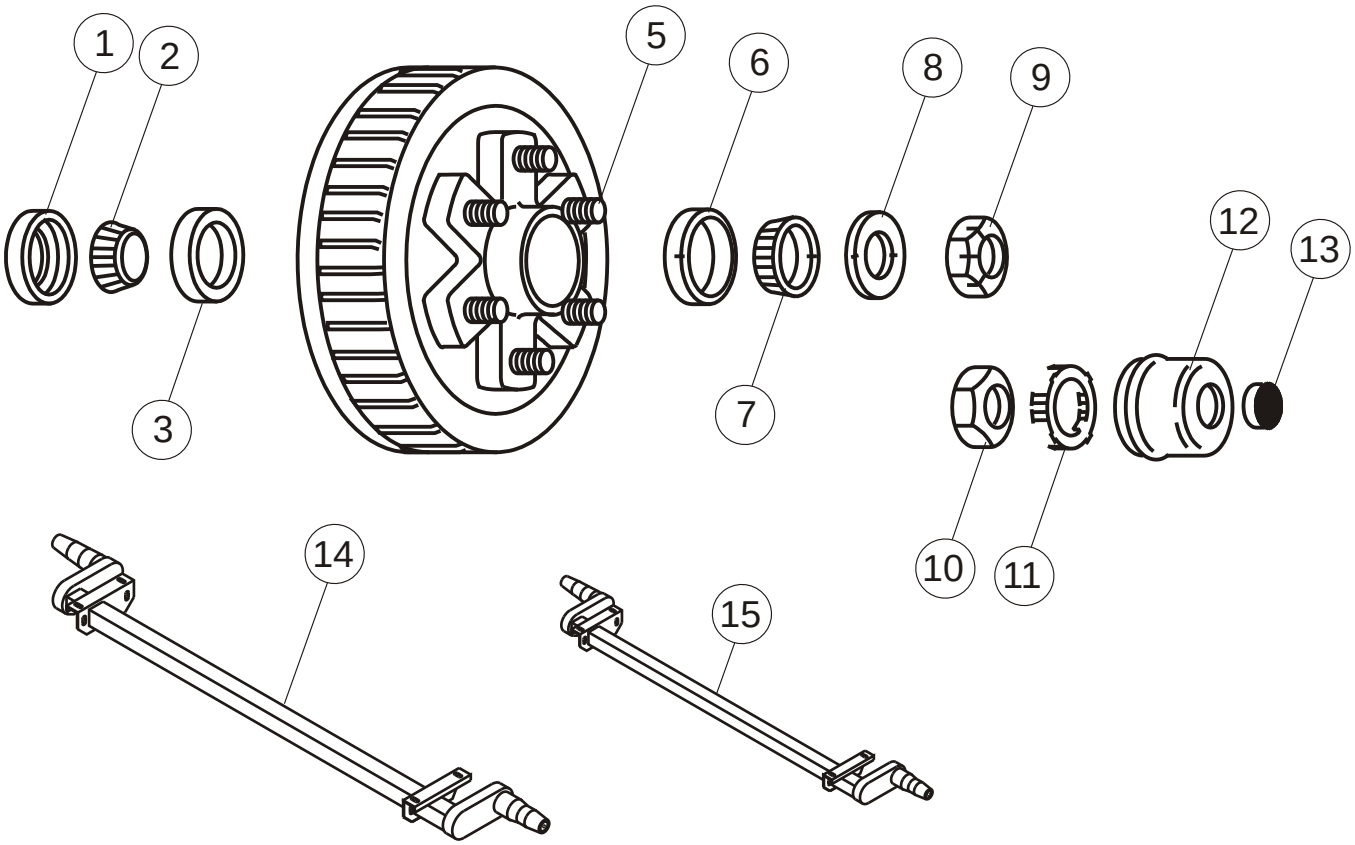
# 3.5K Hub, Drum and Axles (E-Z lube)




| Item | Part # | Description |
|---|---|---|
| | 25-3505 | hub and drum assembly |
| | | |
| 1 | 25-0002 | grease seal |
| 2 | 25-3510 | inner bearing cone |
| 3 | 25-3512 | inner race |
| | | |
| 5 | 25-6161 | 1/2" drive-in stud |
| 6 | 25-3518 | outer race |
| 7 | 25-3520 | outer bearing cone |
| 8 | 25-3522 | spindle washer |
| | 25-3532 | tang washer (not shown) |
| 9 | 25-3524 | spindle nut |
| 10 | 25-1526 | jam nut |
| 11 | 25-1524 | nut retainer |
| 12 | 25-3528 | grease cap |
| 13 | 25-3530 | grease cap plug |
| | | |
| | | |
| | 37-0701 | 1/2"cone wheel nut (not shown) |
| | | |
| | | Complete axles... |
| | 23-0015 | 3.5k axle, electric (Pan) |
| | 23-0017 | 3.5k axle, hydraulic (Pan) |
| | 23-0017F | 3.5k axle, hydraulic, free backing (Pan) |
| | 23-0012 | 3.5k axle, electric (Tilt) |
| | 23-0014 | 3.5k axle, hydraulic (Tilt) |
| | 23-0014F | 3.5k axle, hydraulic, free backing (Tilt) |
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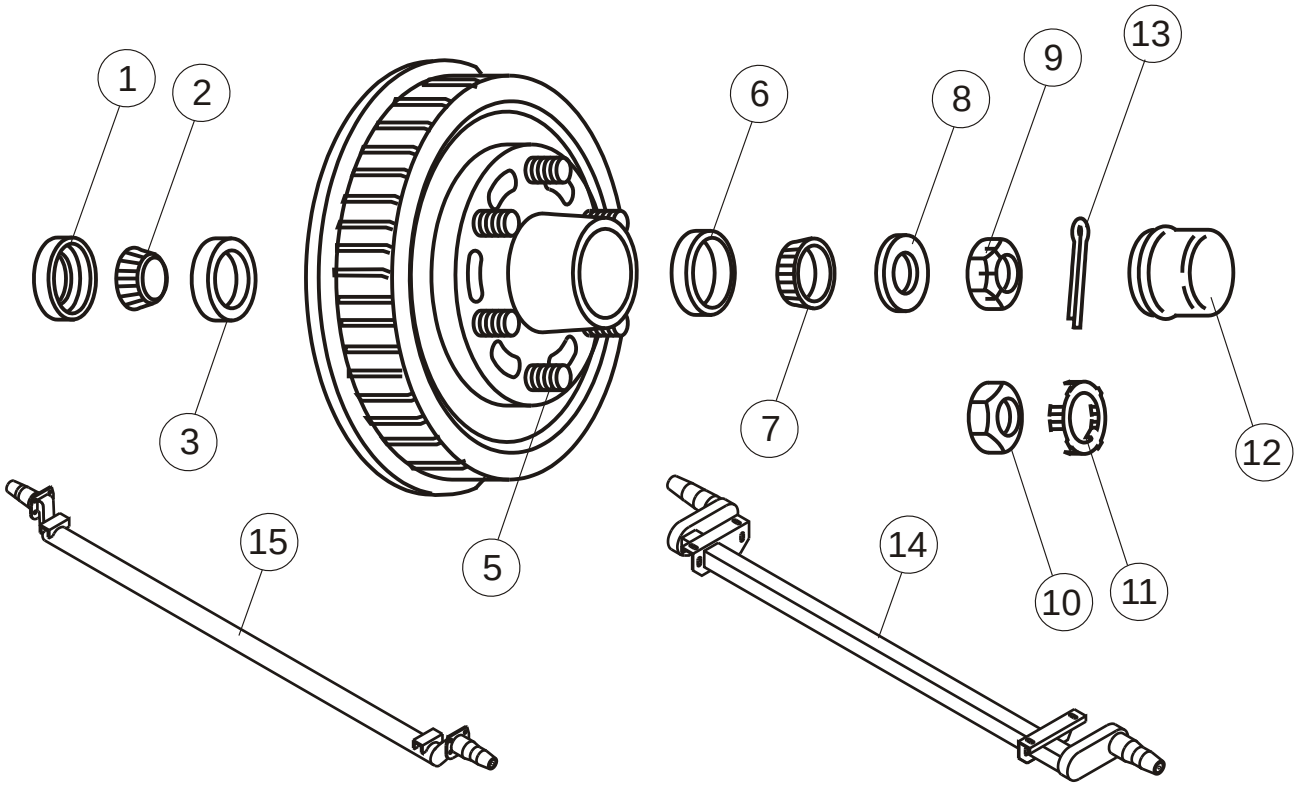
# 6K and 7K Hub, Drum and Axles (non E-Z lube)




Note: 6K, 6 bolt assembly is shown, please indicate 6K, 7K, 6 bolt or 8 bolt when ordering.

| Item | Part # | Description |
|---|---|---|
| | 25-6000 | 6K hub and drum assembly, 6 bolt |
| | 25-5005 | 6K / 7K hub and drum assembly, 8 bolt |
| | | |
| 1 | 25-0005 | grease seal, 2.25" i.d. |
| 2 | 25-6010 | inner bearing cone |
| 3 | 25-6012 | inner race |
| | | |
| 5 | 25-6161 | 1/2" drive-in stud |
| 6 | 25-6018 | outer race, 6 bolt |
| | 25-9010 | outer race, 8 bolt |
| 7 | 25-6020 | outer bearing cone, 6 bolt |
| | 25-9015 | outer bearing cone, 8 bolt |
| 8 | 25-3522 | spindle washer |
| 9 | 25-3524 | spindle nut |
| 10 | 25-1526 | jam nut |
| 11 | 25-1524 | nut retainer |
| 12 | 25-6026 | grease cap, 6 bolt |
| | 25-5020 | grease cap, 8 bolt |
| 13 | 25-6016 | cotter pin |
| | | |
| | | |
| | 37-0701 | 1/2" cone wheel nut (not shown) |
| | | Complete axles... |
| | 23-0003 | axle, 6k rubber ride, electric |
| | 23-0013 | axle, 6k rubber ride, hydraulic |
| | 23-0013F | axle, 6k rubber ride, hydraulic, free backing |
| | 23-0083 | axle, 7k rubber ride, electric (BE-7) |
| | 23-0005 | axle, 6k spring, 4" drop, electric |
| | 23-0008 | axle, 6k spring, 4" drop, hydraulic |
| | 23-0008F | axle, 6k spring, 4" drop, hydraulic, free backing |
| | 23-8002 | axle, 6k rubber ride, electric, 45 deg. down (BE-5LS, BE-6LS only) |
| | 23-7421 | axle, 7k rubber ride, electric, 45 deg. down (BE-7LS only) |
| | | |
| | | |
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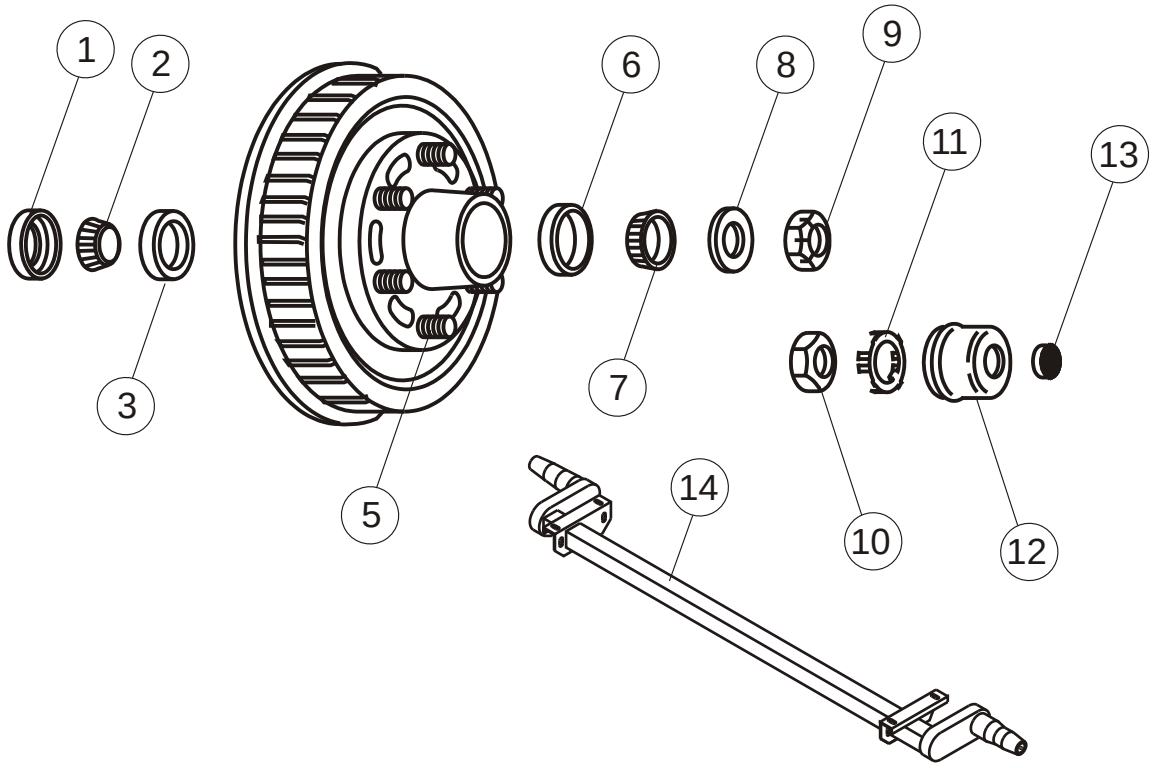
# 6K Hub, Drum and Axles (E-Z lube)




Note: 6 bolt assembly is shown, please indicate 6 or 8 bolt when ordering.

| Item | Part # | Description |
|---|---|---|
| | 25-6005 | hub and drum assembly, 6 bolt |
| | 25-5005 | hub and drum assembly, 8 bolt |
| | | |
| 1 | 25-0005 | grease seal, 2.25" i.d. |
| 2 | 25-6010 | inner bearing cone |
| 3 | 25-6012 | inner race |
| | | |
| 5 | 25-6161 | 1/2" drive-in stud |
| 6 | 25-6018 | outer race |
| 7 | 25-6020 | outer bearing cone, 6 bolt |
| | 25-9015 | outer bearing cone, 8 bolt |
| 8 | 25-3522 | spindle washer |
| | 25-3532 | tang washer (not shown) |
| 9 | 25-3524 | spindle nut |
| 10 | 25-1526 | jam nut |
| 11 | 25-1524 | nut retainer |
| 12 | 25-6028 | grease cap, 6 bolt |
| | 25-5010 | grease cap, 8 bolt |
| 13 | 25-3530 | grease cap plug |
| | | |
| | 37-0701 | 1/2" cone wheel nut (not shown) |
| | | |
| | | |
| | | |
| | | Complete axles... |
| | 23-0007 | 6k axle, rubber ride, electric, 10 deg. up, 6 bolt (8 bolt: 23-2507) |
| | 23-0009 | 6k axle, rubber ride, hydraulic, 10 deg. up, 6 bolt (8 bolt: 23-2509) |
| | 23-0009F | 6k axle, rubber ride, hydraulic, 10 deg. up, free backing, 6 bolt (23-2509F) |
| | 23-0004 | 6k axle, rubber ride, electric, 22.5 deg. up, 6 bolt (8 bolt: 23-2530) |
| | 23-0010 | 6k axle, rubber ride, hydraulic, 22.5 deg. up, 6 bolt (8 bolt: 23-2535) |
| | 23-0010F | 6k axle, rubber ride, hydraulic, 22.5 deg. up, free backing, 6 bolt |
| | | |
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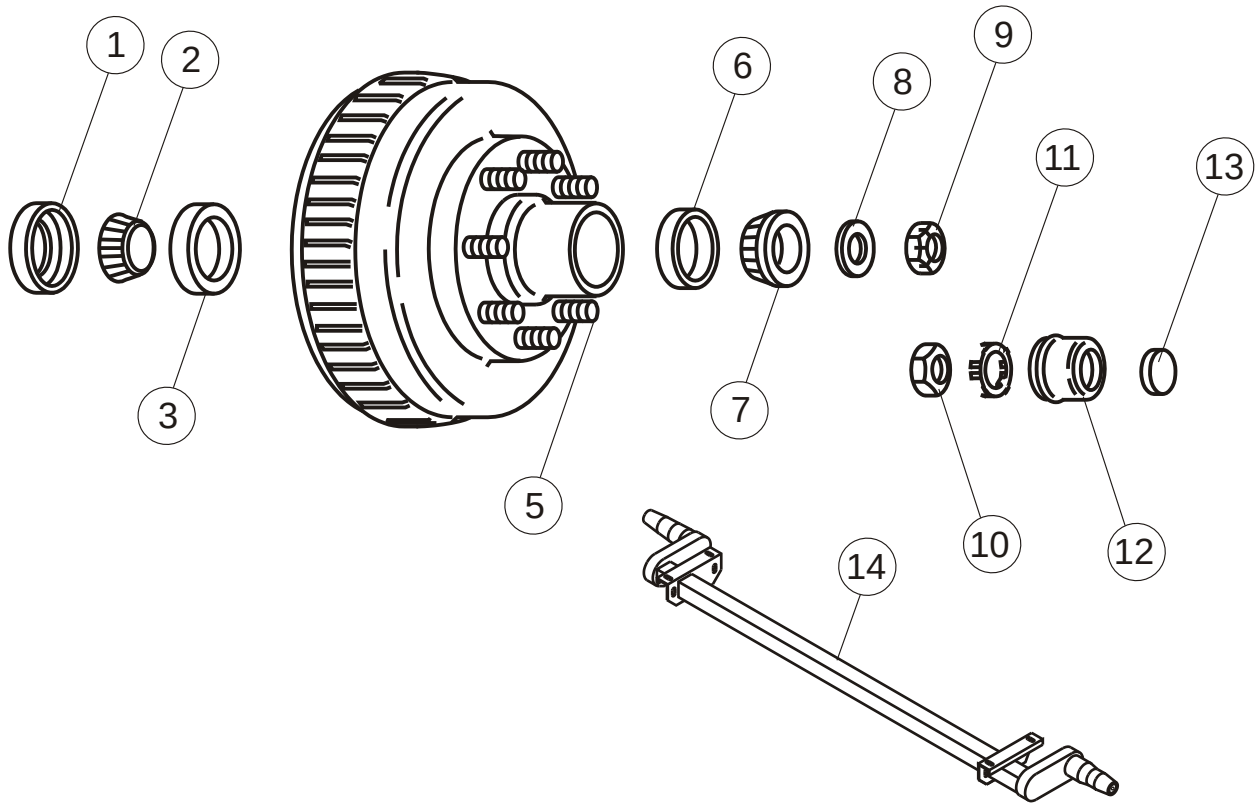
# 7.2K Hub, Drum and Axle




| Item | Part # | Description |
|---|---|---|
| | 25-4012C | hub and drum assembly, 5/8" studs (used with cast iron brake backing plates) |
| | | |
| 1 | 25-8010 | unitized oil seal, 3.376" o.d., 2.250" i.d. |
| 2 | 25-6010 | inner bearing |
| 3 | 25-6012 | inner race |
| | | |
| 5 | 25-4023 | drive-in stud, 5/8" |
| 6 | 25-8015 | outer race |
| 7 | 25-8020 | outer bearing |
| 8 | 25-6022 | spindle washer |
| | 25-3532 | tang washer (not shown) |
| 9 | 25-3524 | spindle nut |
| 10 | 25-1526 | jam nut |
| 11 | 25-1524 | nut retainer |
| 12 | 25-5010 | drive-in grease cap, 2.72" o.d. |
| 13 | 25-3530 | grease cap plug |
| | | |
| | | |
| | 25-8032 | 5/8" flange wheel nut (not shown) |
| | | |
| | 23-0084 | complete 7,200 lb. rubber ride axle, 5/8" studs |
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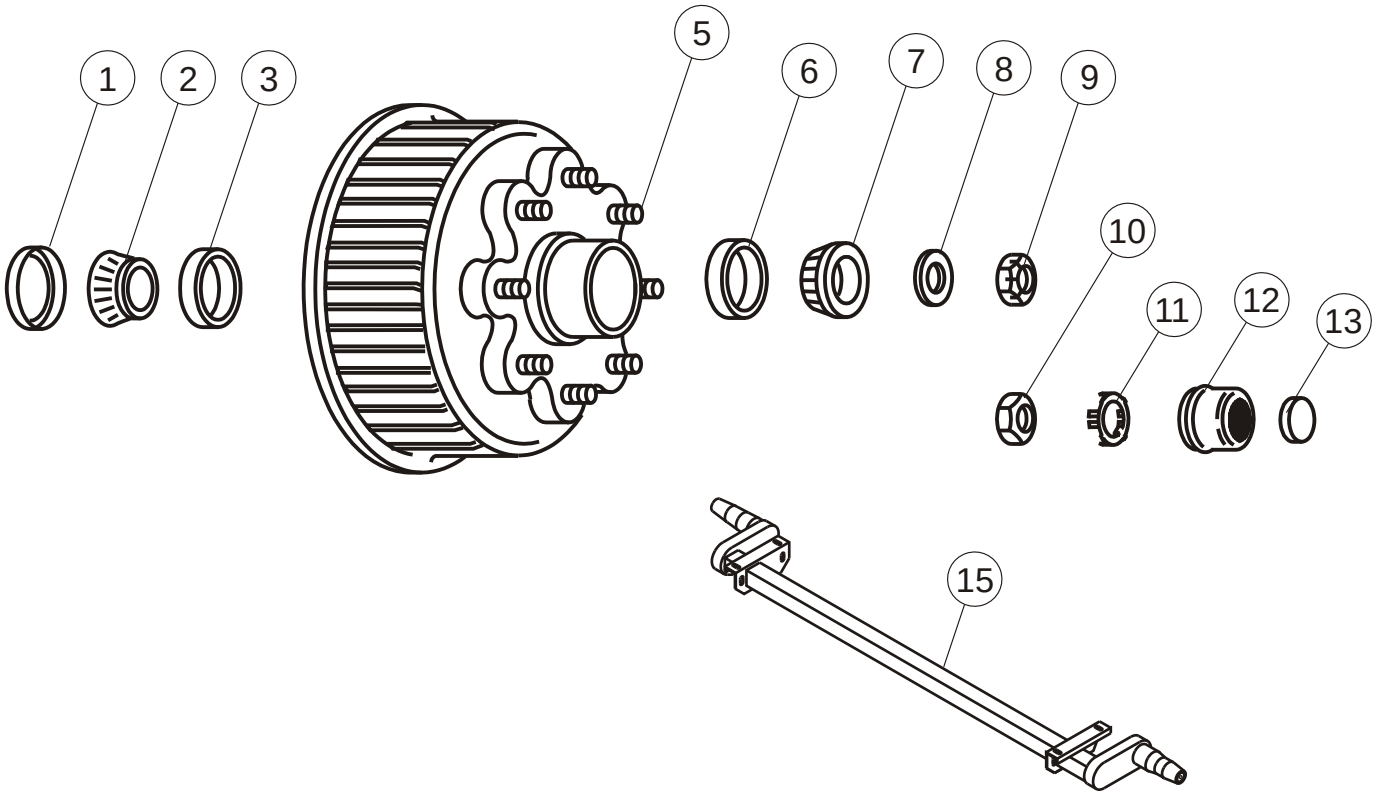
# 8K Hub, Drum and Axles




| Item | Part # | Description |
|---|---|---|
| | 25-8002 | hub and drum assembly |
| | | |
| 1 | 25-8010 | unitized oil seal, 3.376" o.d., 2.25" i.d. |
| 2 | 25-6010 | inner bearing |
| 3 | 25-6012 | inner race |
| | | |
| 5 | 25-1015 | drive-in stud, 5/8" |
| 6 | 25-8015 | outer race |
| 7 | 25-8020 | outer bearing |
| 8 | 25-6022 | spindle washer |
| | 25-3532 | tang washer (not shown) |
| 9 | 25-3524 | spindle nut |
| 10 | 25-1526 | jam nut |
| 11 | 25-1524 | nut retainer |
| 12 | 25-5010 | drive-in grease cap, 2.72" o.d. |
| 13 | 25-3530 | grease cap plug |
| | | |
| | 25-8032 | 5/8" flange wheel nut (not shown) |
| | | |
| | | |
| | | Complete axles... |
| | 23-0030 | complete axle assembly, rubber ride, electric brakes (DD, PRS) |
| | 23-0036 | complete axle assembly, rubber ride, hydraulic brakes (DD, PRS) |
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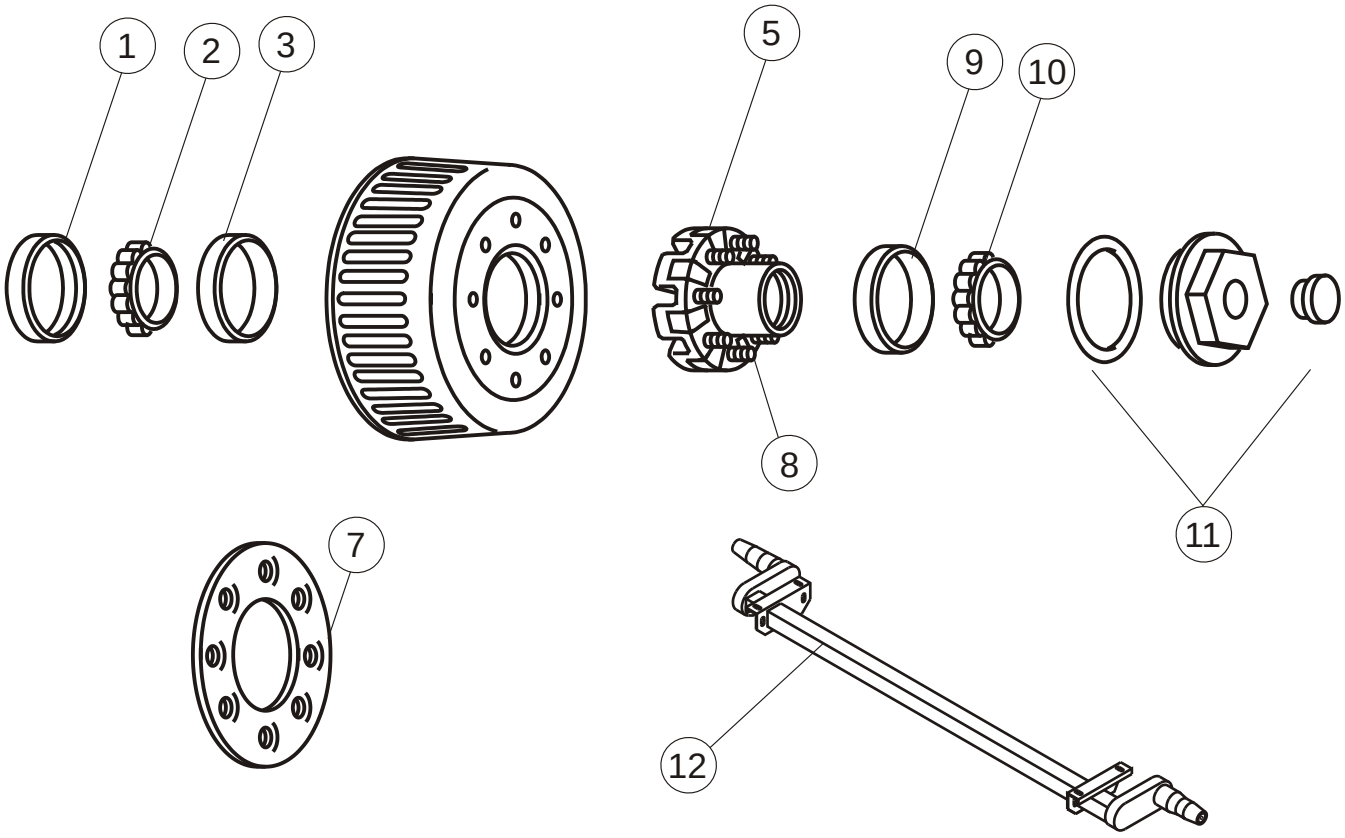
# 9K, 10K General Duty Hub and Drum




| Item | Part # | Description |
|---|---|---|
| | 25-0900 | complete hub assembly (does not include drum) |
| | | |
| 1 | 25-0901 | unitized oil seal, 3.88" o.d., 2.875" i.d. |
| 2 | 25-1019 | inner bearing |
| 3 | 25-1017 | inner race |
| | | |
| 5 | 25-0909 | hub only |
| 6 | 25-8032 | 5/8" flange wheel nut (B-9DDB, B-9PRS) |
| | 25-1011 | 5/8" cone wheel nut |
| 7 | 25-1023 | wheel retaining ring |
| 8 | 25-1015 | 5/8" drive-in stud |
| 9 | 25-6012 | outer race |
| 10 | 25-6010 | outer bearing |
| 11 | 25-1021 | oil cap kit (includes cap, o-ring and plug) |
| | | |
| | | |
| | 23-0035 | 10,000 lb. Torflex axle, electric brakes (DDB, PRS) |
| | 23-0037 | 10,000 lb. Torflex axle, hydraulic brakes (DDB, PRS) |
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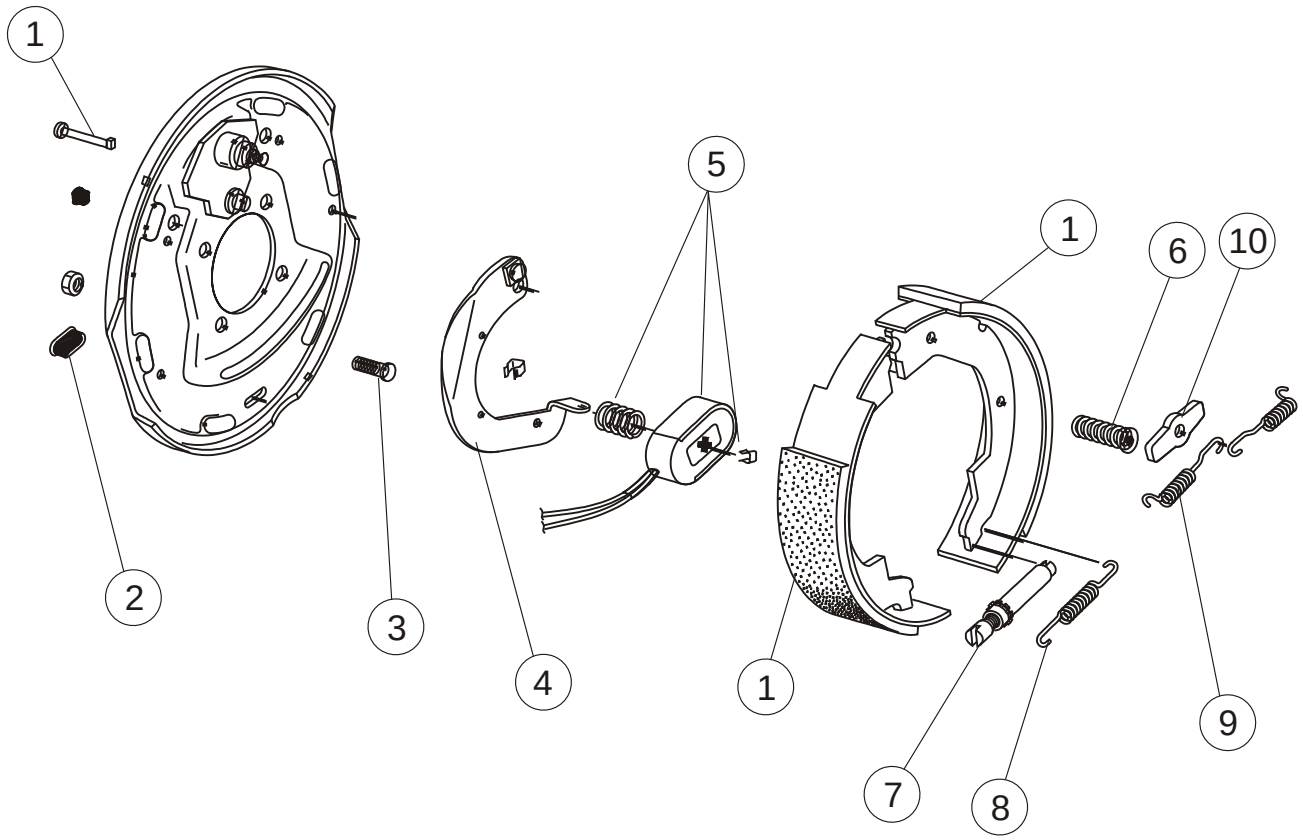
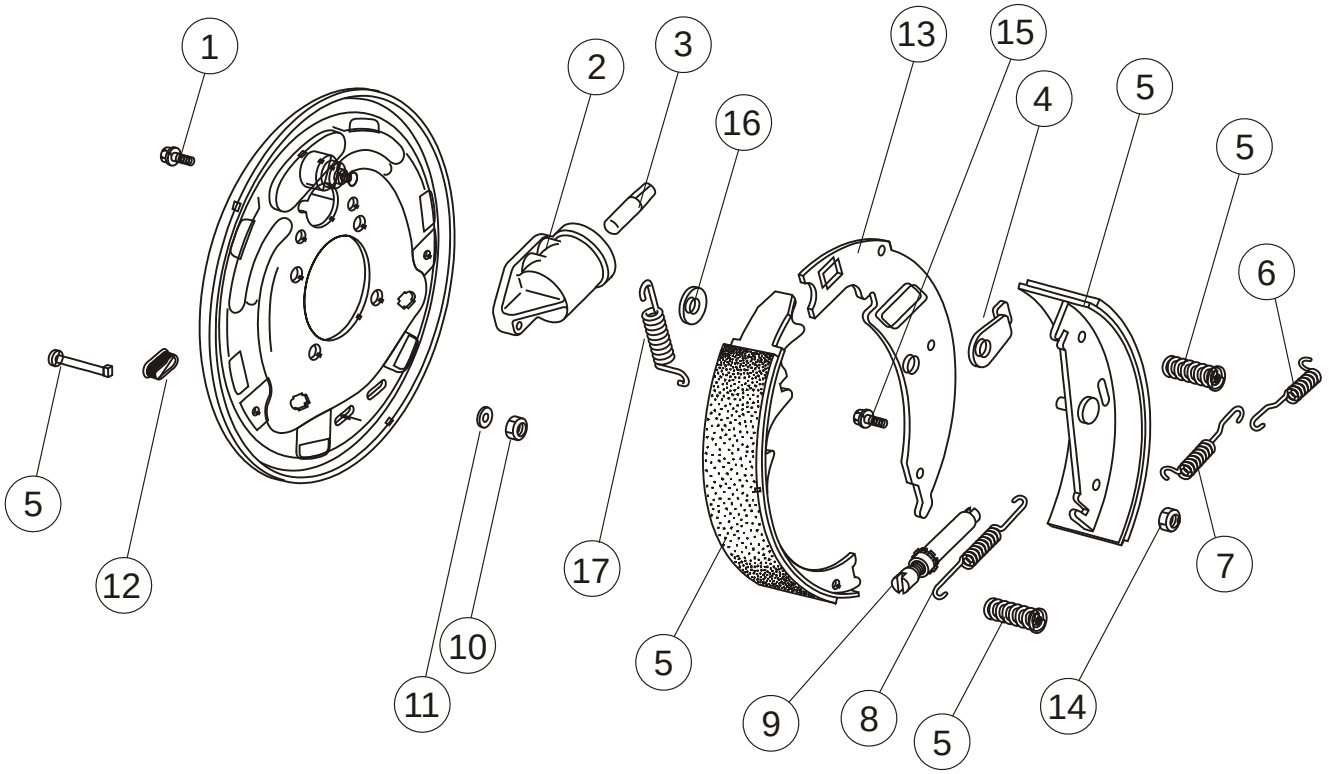
# 3.5K Electric Brake, 10" x 2 1/4"




| Item | Part # | Description |
|---|---|---|
| | 31-3501 | complete assembly, l.h. |
| | 31-3503 | complete assembly, r.h. |
| | | |
| 1 | 31-3505 | shoe and lining kit |
| 2 | 31-3507 | dust plug, pkg. of 4 |
| 3 | 31-3509 | brake mounting bolt |
| 4 | 31-3511 | actuating lever arm, l.h. |
| | 31-3513 | actuating lever arm, r.h. |
| 5 | 31-3515 | magnet kit |
| 6 | 31-3517 | hold down springs |
| 7 | 31-3519 | adjuster assembly |
| 8 | 31-3521 | adjuster screw spring |
| 9 | 31-3523 | retractor spring, one pair |
| 10 | 31-3525 | anchor post washer |

# 3.5K Hydraulic Brake, 10" x 2 1/4", Free Backing




| Item | Part # | Description |
|---|---|---|
| | 31-3705 | complete brake assembly, l.h. |
| | 31-3710 | complete brake assembly, r.h. |
| | | |
| 1 | 31-3610 | screw and washer assembly |
| 2 | 31-3606 | brake cylinder, l.h. |
| | 31-3608 | brake cylinder, r.h. |
| 3 | 31-6370 | push rod |
| 4 | 31-6320 | travel link |
| 5 | 31-3715 | shoe and lining kit |
| 6 | 31-6325 | shoe lever return spring |
| 7 | 31-6023 | retractor spring |
| 8 | 31-3720 | adjusting screw spring |
| 9 | 31-3519 | adjuster assembly |
| 10 | 31-3620 | brake mounting nut |
| 11 | 31-6380 | lock washer |
| 12 | 31-3507 | dust plug |
| 13 | 31-3725 | shoe lever |
| 14 | 31-6350 | lock nut |
| 15 | 31-6355 | screw |
| 16 | 31-6360 | washer |
| 17 | 31-6365 | primary shoe return spring |
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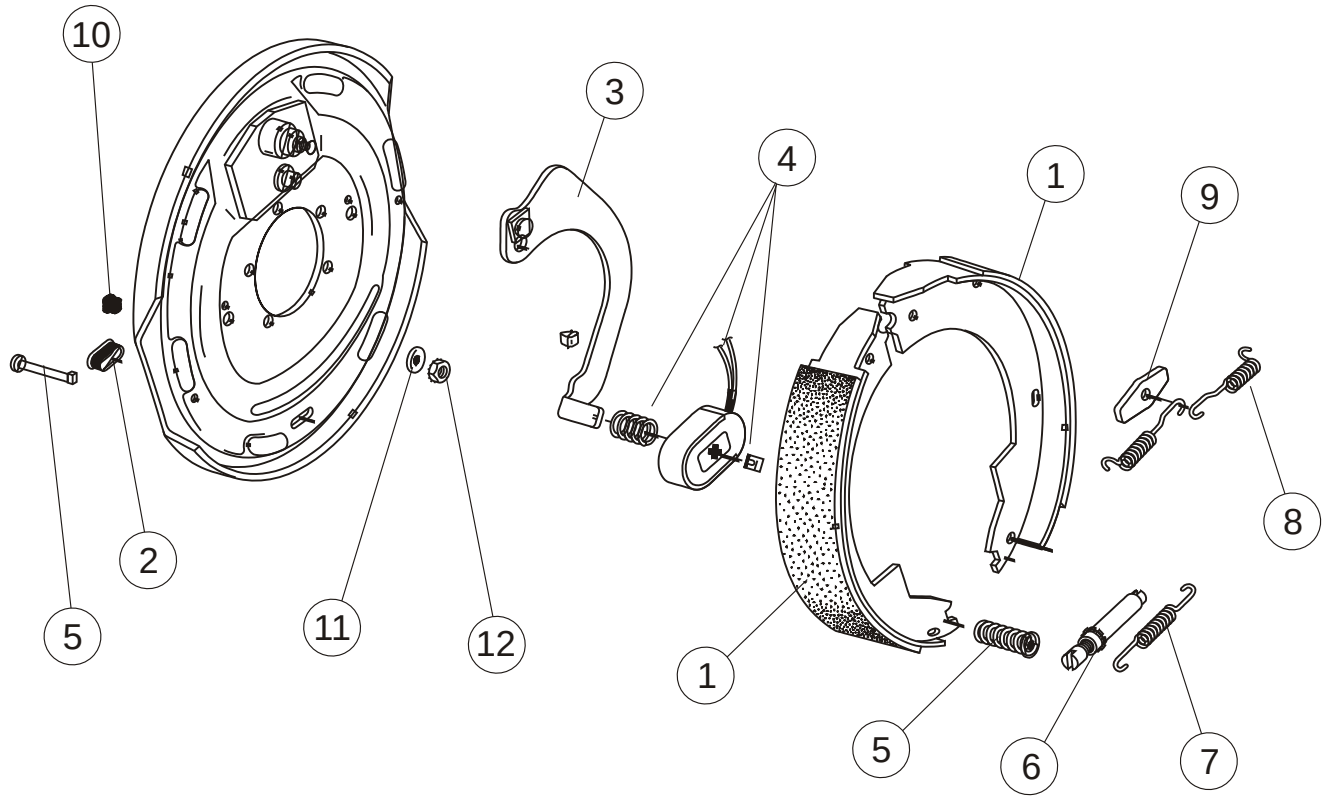
# 6K, 7K Electric Brake, 12" x 2"




| Item | Part # | Description |
|---|---|---|
| | 31-6001 | 6K complete assembly, l.h. |
| | 31-6003 | 6K complete assembly, r.h. |
| | | |
| | 31-1434 | 7K complete assembly, l.h. |
| | 31-1436 | 7K complete assembly, r.h. |
| | | |
| 1 | 31-6005 | shoe and lining kit |
| | 31-1432 | shoe and lining kit, 7K |
| 2 | 31-3507 | dust plug (pkg. of 4) |
| 3 | 31-6011 | actuating lever arm, l.h. |
| | 31-6013 | actuating lever arm, r.h. |
| 4 | 31-6015 | magnet kit, 6K |
| | 31-1430 | magnet kit, 7K |
| 5 | 31-3517 | hold down springs |
| 6 | 31-3519 | adjuster assembly |
| 7 | 31-3521 | adjuster screw spring |
| 8 | 31-6023 | retractor spring (one pair) |
| 9 | 31-3525 | anchor post washer |
| 10 | 31-6027 | wire grommet |
| 11 | 31-6029 | lock washer |
| 12 | 31-6031 | brake mounting nut |
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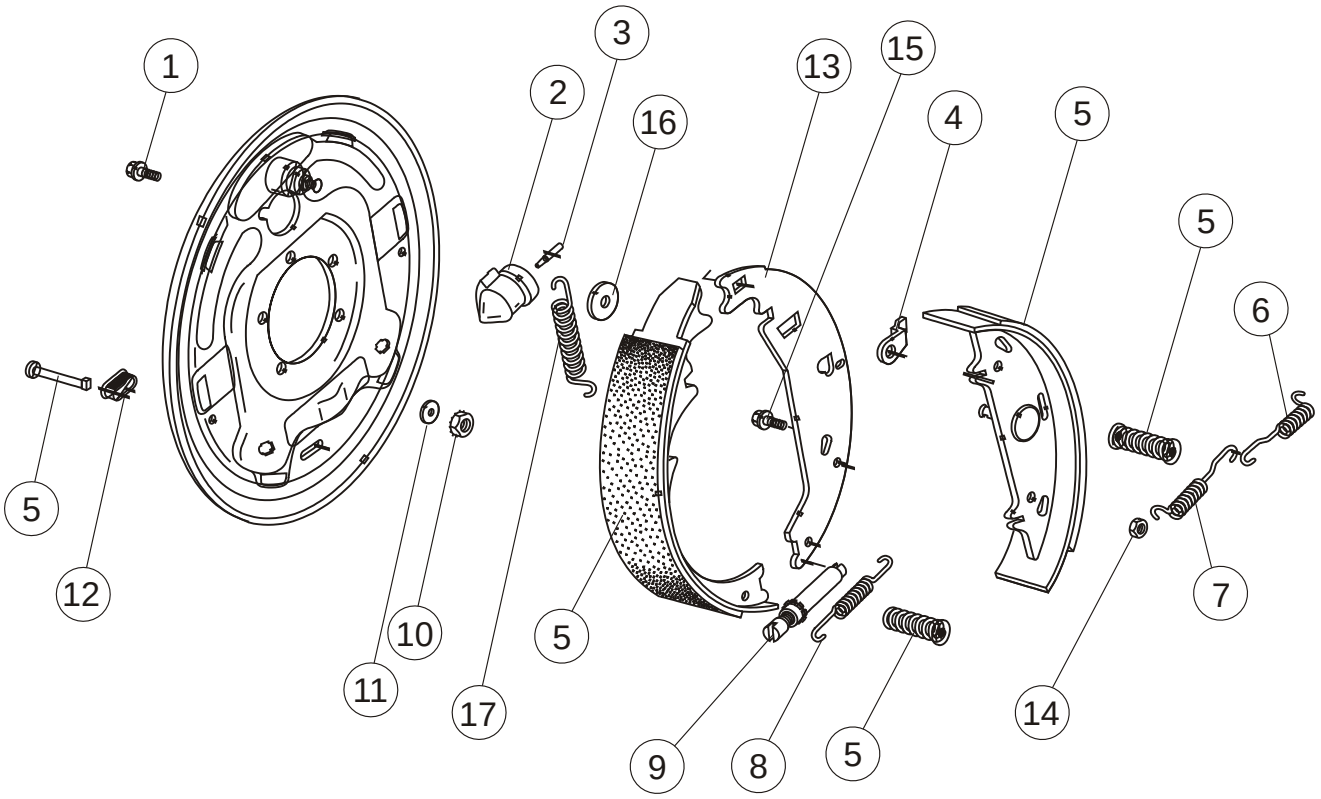
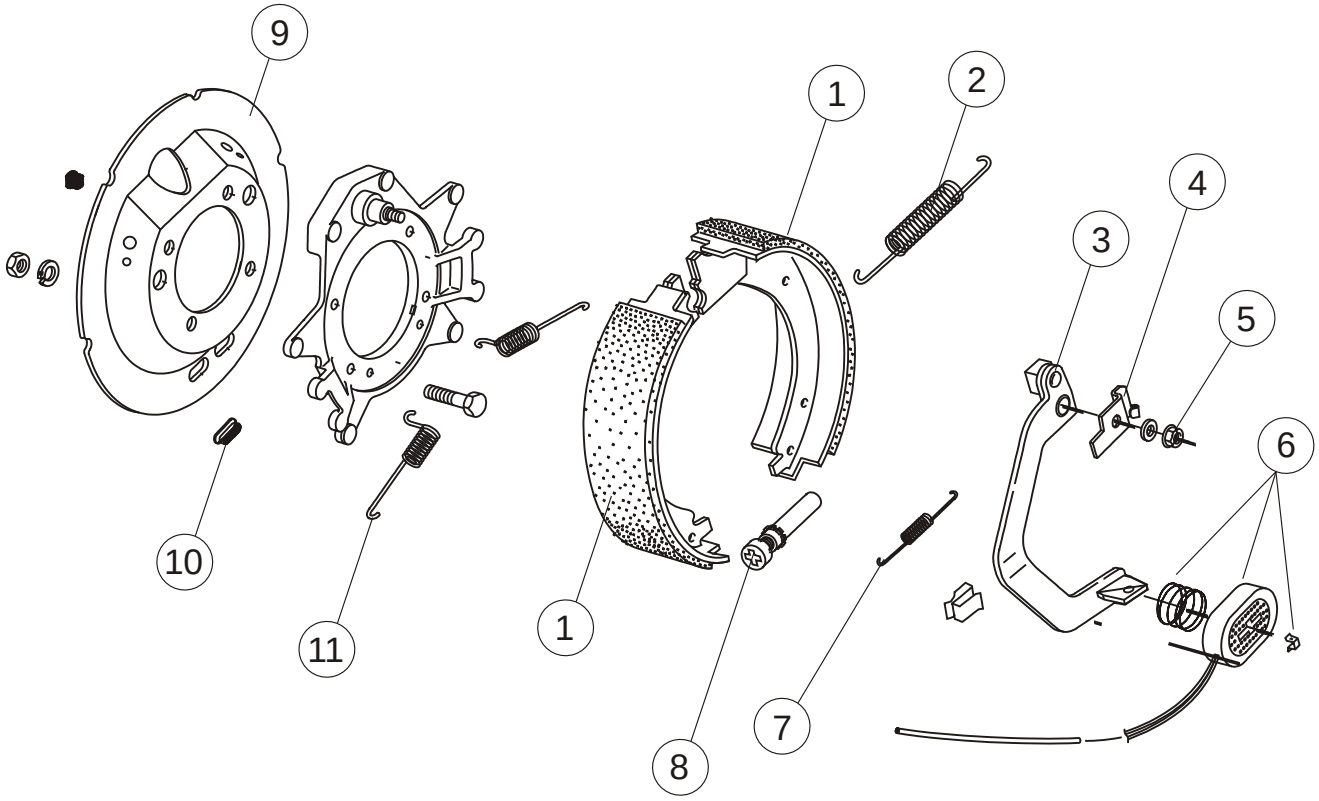
# 6K Hydraulic Brake, 12" x 2", Free Backing




| Item | Part # | Description |
|---|---|---|
| | 31-6305 | complete brake assembly, l.h. |
| | 31-6310 | complete brake assembly, r.h. |
| | | |
| 1 | 31-3610 | screw and washer assembly |
| 2 | 31-3606 | brake cylinder, l.h. |
| | 31-3608 | brake cylinder, r.h. |
| 3 | 31-6370 | push rod |
| 4 | 31-6320 | travel link |
| 5 | 31-6330 | shoe and lining kit, l.h. |
| | 31-6332 | shoe and lining kit, r.h. |
| 6 | 31-6325 | shoe lever return spring |
| 7 | 31-6106 | retractor spring |
| 8 | 31-6340 | adjusting screw spring |
| 9 | 31-6335 | adjuster assembly |
| 10 | 31-6375 | brake mounting nut |
| 11 | 31-6380 | lock washer |
| 12 | 31-3507 | dust plug |
| 13 | 31-6345 | shoe lever |
| 14 | 31-6350 | lock nut |
| 15 | 31-6355 | screw |
| 16 | 31-6360 | washer |
| 17 | 31-6365 | primary shoe return spring |

# 7.2K Electric Brake, 12 1/4" x 2 1/2"




| Item | Part # | Description |
|---|---|---|
| | 31-1504C | l.h. complete brake assembly |
| | 31-1502C | r.h. complete brake assembly |
| | | |
| 1 | 31-1515CL | l.h. shoe and lining kit |
| | 31-1515CR | r.h. shoe and lining kit |
| 2 | 31-1518 | shoe return spring (grey) |
| 3 | 31-1511 | l.h. actuating arm assembly |
| | 31-1513 | r.h. actuating arm assembly |
| 4 | 31-1015 | l.h. lever arm retainer |
| | 31-1017 | r.h. lever arm retainer |
| 5 | 31-1535 | flange nut |
| 6 | 31-1010 | magnet kit |
| 7 | 31-3521 | adjuster spring (red) |
| 8 | 31-1519 | adjuster assembly |
| 9 | 31-1540 | dust shield |
| 10 | 31-3507 | adjuster slot plug |
| 11 | 31-1322 | centering spring |
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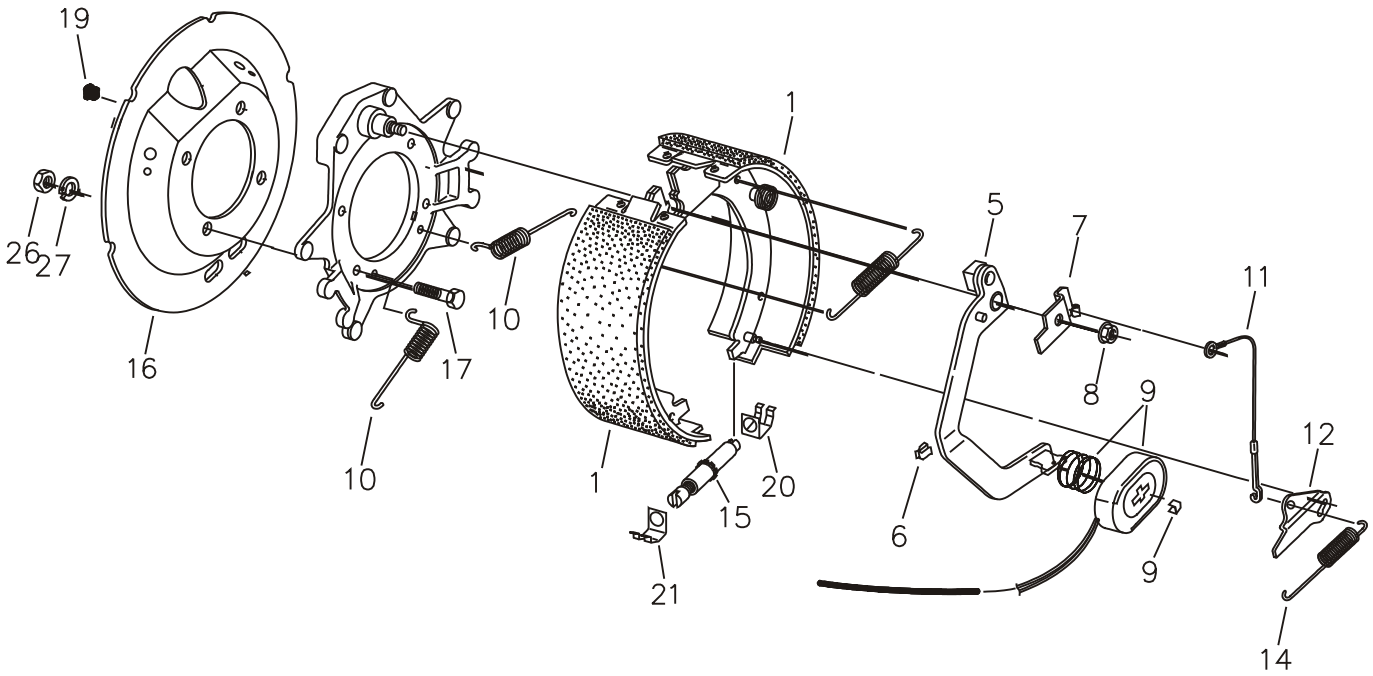
# 8K Electric Brake, 12 1/4" x 3 3/8"




| Item | Part # | Description |
|---|---|---|
| | 310829c | l.h. brake assembly |
| | 310831c | r.h. brake assembly |
| | | |
| 1 | 310901c | l.h. shoe and lining kit |
| | 310903c | r.h. shoe and lining kit |
| | | |
| 5 | 311007 | l.h. actuator arm assembly |
| | 311009 | r.h. actuator arm assembly |
| 7 | 311015 | l.h. arm/shoe retainer |
| | 311017 | r.h. arm/shoe retainer |
| 8 | 311535 | flange nut |
| 9 | 311347 | magnet kit |
| 10 | 311322 | centering spring |
| 11 | 311025 | adjuster cable |
| 12 | 311323 | l.h. adjuster lever |
| | 311324 | r.h. adjuster lever |
| 14 | 311325 | adjuster spring |
| 15 | 311326 | l.h. adjuster assembly |
| | 311327 | r.h. adjuster assembly |
| 16 | 311328 | dust shield |
| 17 | 311329 | brake mounting bolt |
| 19 | 316027 | wire grommet |
| 20 | 311368 | adjuster clip (barrel end) |
| 21 | 311367 | adjuster clip (thread end) |
| 26 | 311330 | brake mounting nut |
| 27 | 311331 | brake mounting lockwasher |
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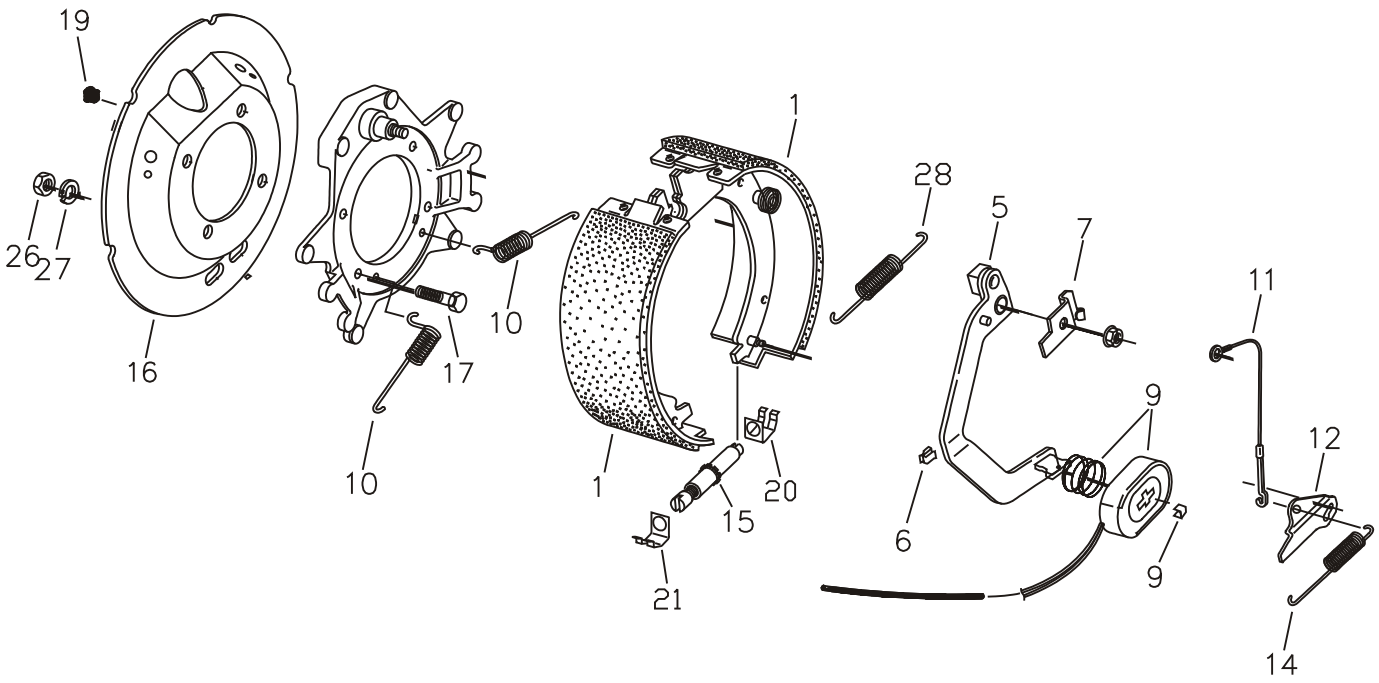
# 9K, 10K General Duty Electric Brake, 12 1/4" x 3 3/8"




| Item | Part # | Description |
|---|---|---|
| | 310929c | l.h. brake assembly |
| | 310931c | r.h. brake assembly |
| | | |
| 1 | 310903c | l.h. shoe and lining kit |
| | 310901c | r.h. shoe and lining kit |
| | | |
| 5 | 311007 | l.h. actuator arm assembly |
| | 311009 | r.h. actuator arm assembly |
| 7 | 311015 | l.h. arm/shoe retainer |
| | 311017 | r.h. arm/shoe retainer |
| | | |
| 9 | 311011 | magnet kit |
| 10 | 311322 | centering spring |
| 11 | 311351 | adjuster cable |
| 12 | 311323 | l.h. adjuster lever |
| | 311324 | r.h. adjuster lever |
| 14 | 311325 | adjuster spring |
| 15 | 311326 | l.h. adjuster assembly |
| | 311327 | r.h. adjuster assembly |
| 16 | 311363 | dust shield |
| 17 | 311352 | brake mounting screw |
| 19 | 316027 | wire grommet |
| 20 | 311367 | adjuster clip (thread end) |
| 21 | 311368 | adjuster clip (barrel end) |
| 26 | 311353 | brake mounting nut |
| 27 | 311354 | brake mounting lockwasher |
| 28 | 311518 | return spring |
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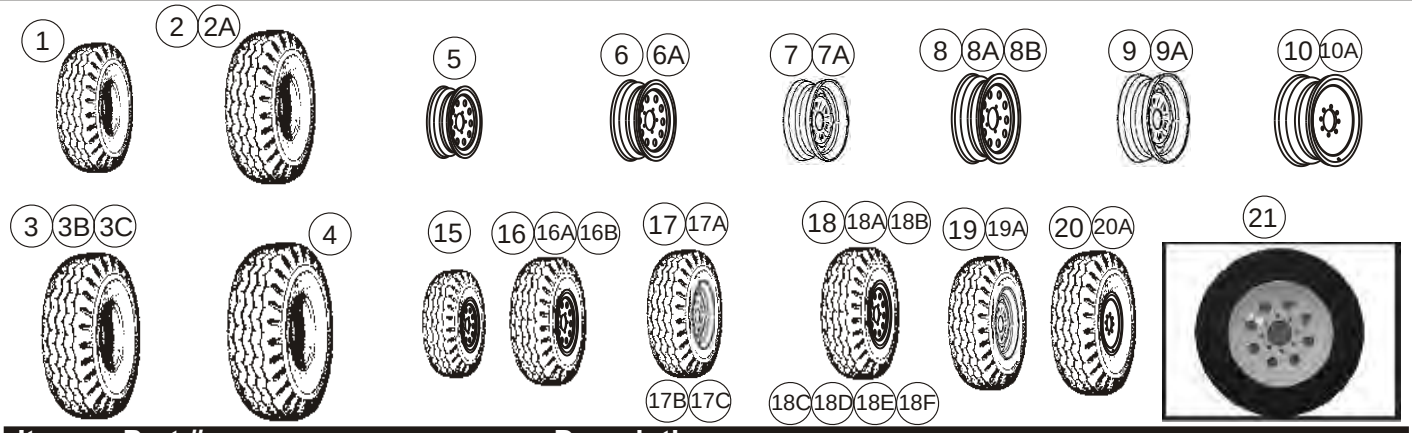
# Wheels and Tires




| Item | Part # | Description |
|---|---|---|
| 1 | 27-0070 | tire only, ST175/80R x 13, load range "C" |
| 2 | 27-0050 | tire only, ST205/75R x 15, load range "C" |
| 2A | 27-0020 | tire only, ST225/75R x 15, load range "D" |
| 3 | 27-0090 | tire only, 235/85R x 16, load range "E" |
| 3B | 27-0044 | tire only, 245/75R x 16, load range "E" |
| 3C | 27-0043 | tire only, 235/85R x 16, 12 ply, load range “G” |
| 4 | 27-0040 | tire only, 215/75R x 17.5, 16 ply, load range "H" |
| | | |
| 5 | 27-0700 | wheel only, 4.5" x 13", white modular, 5 bolt on 4 1/2" b.c. |
| 6 | 27-0104 | wheel only, 6" x 15", white modular, 6 bolt on 5 1/2" b.c. |
| 6A | 27-0107 | wheel only, 6" x 15", white modular, 8 bolt on 6 ½" b.c. |
| | 27-0105 | wheel only, 6" x 15", spoke, 8 bolt on 6 ½"b.c. (not shown) |
| 7 | 27-0112 | wheel only, 6" x 15", oem, 5 bolt on 4 1/2" b.c. |
| 7A | 27-0102 | wheel only, 6" x 15", oem, 6 bolt on 5 1/2" b.c. |
| 8 | 27-0110 | wheel only, 6" x 16", white modular, 6 bolt on 5 1/2" b.c. |
| 8A | 27-0111 | wheel only, 6" x 16", white modular, 8 bolt |
| 8B | 27-0130 | wheel only, 6" x 16", white modular, 6 bolt on 5 1/2" b.c., 1/2" offset |
| 9 | 27-0108 | wheel only, 6" x 16" oem, 6 bolt |
| 9A | 27-0109 | wheel only, 6" x 16" oem, 8 bolt |
| 10 | 27-0602 | wheel only, 6.75" x 17.5" single wheel, 8 bolt (silver) different offset than white wheel |
| 10A | 27-0606 | wheel only, 6.75" x 17.5" single wheel, 8 bolt (white) different offset than silver wheel |
| | 27-0631 | wheel only, 6.75” x 17.5” single wheel, 8 bolt white modular |
| | | |
| 15 | 27-5030 | tire/wheel assembly, ST175/80R x 13, load range "C" on 4.5" x 13" white mod., 5 bolt on 4 1/2" b.c. |
| 16 | 27-5003 | tire/wheel assembly, ST205/75R x 15, load range "C" on 6" x 15", white mod., 6 bolt on 5 1/2" b.c. |
| 16A | 27-5005 | tire/wheel assembly, ST225/75R x 15, load range "D" on 6" x 15", white mod., 6 bolt on 5 1/2" b.c. |
| 16B | 27-4120 | tire/wheel assembly, ST225/75R x 15, load range "D" on 6" x 15", white mod, 8 bolt on 6 ½"b.c. |
| | 27-4100 | tire/wheel assembly, ST225/75R x 15, load range "D" on 6" x 15", spoke, 8 bolt on 6 ½"b.c. (not shown) |
| 17 | 27-4080 | tire/wheel assembly, ST205/75R x 15, load range "C" on 6" x 15", oem, 5 bolt on 4 1/2" b.c. |
| 17A | 27-5002 | tire/wheel assembly, ST205/75R x 15, load range "C" on 6" x 15", oem, 6 bolt on 5 1/2" b.c. |
| 17B | 27-4090 | tire/wheel assembly, ST225/75R x 15, load range "D" on 6" x 15" oem, 5 bolt on 4 1/2" b.c. |
| 17C | 27-5004 | tire/wheel assembly, ST225/75R x 15, load range "D" on 6" x 15" oem, 6 bolt on 5 1/2" b.c. |
| 18 | 27-6010 | tire/wheel assembly, 235/85R x 16, load range "E" on 6" x 16", white mod., 6 bolt on 5 1/2" b.c. |
| 18A | 27-6020 | tire/wheel assembly, 235/85R x 16, load range "E" on 6" x 16", white mod., 8 bolt |
| 18B | 27-5022 | tire/wheel assembly, 245/75R x 16, load range "E" on 6" x 16", white mod., 6 bolt on 5 1/2" b.c. |
| 18C | 27-5060 | tire/wheel assembly, 245/75R x 16, load range "E" on 6" x 16", white mod., 8 bolt |
| 18D | 27-5085 | tire/wheel assembly, 235/85R x 16, load range "E" on 6" x 16", white mod., 6 bolt on 5 1/2" b.c., 1/2" offset |
| 18E | 27-6052 | tire/wheel assembly, 235/85 x 16, 12 ply bias on 6" x 16", white mod., 8 bolt (BE-7) |
| 18F | 27-5073 | tire/wheel assembly, 235/85R x 16, 12 ply radial on 6” x 16”, white mod. 8 bolt (BE-7 upgrade to radial) |
| 19 | 27-6030 | tire/wheel assembly, 235/85R x 16, load range "E" on 6" x 16" oem, 6 bolt |
| 19A | 27-6040 | tire/wheel assembly, 235/85R x 16, load range "E" on 6" x 16" oem, 8 bolt |
| 20 | 27-5014 | tire/wheel assembly, 215/75R x 17.5, 16 ply, load range "H" on 6.75" x 17.5" single wheel, 8 bolt (silver) |
| 20A | 27-5015 | tire/wheel assembly, 215/75R x 17.5, 16 ply, load range "H" on 6.75" x 17.5" single wheel, 8 bolt (white) |
| 21 | 27-6081 | tire/wheel assembly, 215/75R x 17.5, 16 ply, load range “H” on 6.75” x 17.5” single wheel, 8 bolt white mod |
| | | |
| | 37-0413 | valve stem |
| | 37-0501 | valve stem |
| | 37-0573 | valve stem |
| | 37-0574 | valve stem |
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## Tire Ratings

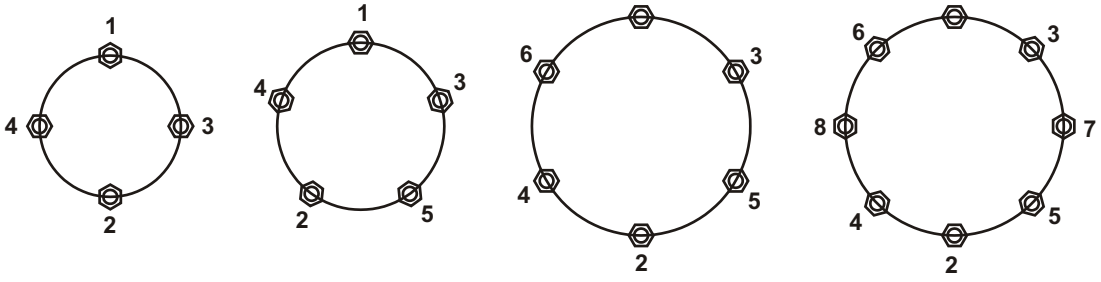
| | | |
|---|---|---|
| **ST17580R x 13** | load range c, 6 ply rating, 1360 lbs. @ 50psi | single wheel application |
| **ST205/75R x 15** | load range c, 6 ply rating, 1820 lbs. @ 50psi | single wheel application |
| **ST225/75R x 15** | load range d, 8 ply rating, 2540 lbs. @ 65psi | single wheel application |
| **215/75R x 17.5** | load range h, 16 ply rating, 4805 lbs. @ 125psi | single wheel application |
| **215/75R x 17.5** | load range h, 16 ply rating, 4540 lbs. @ 125psi | dual wheel application |
| **235/75R x 17.5** | load range h, 16 ply rating, 6005 lbs. @ 125psi | single wheel application |
| **235/75R x 17.5** | load range h, 16 ply rating, 5675 lbs. @ 125psi | dual wheel application |
| **235/85R x 16** | load range g, 12 ply rating, 3750 lbs. @ 110psi | single wheel application |
| **235/85R x 16** | load range g, 12 ply rating, 3415 lbs. @ 110psi | dual wheel application |
| **235/85R x 16** | load range e, 10 ply rating, 3042 lbs. @ 80psi | single wheel application |
| **235/85R x 16** | load range e, 10 ply rating, 2778 lbs. @ 80psi | dual wheel application |
| **235/85 x 16** | load range g, 12 ply *bias*, 3415 lbs. @ 90psi | single wheel application |
| **245/75R x 16** | load range e, 10 ply rating, 3042 lbs. @ 80psi | single wheel application |
| **245/75R x 16** | load range e, 10 ply rating, 2778 lbs. @ 80psi | dual wheel application |

## Wheel Torque Requirements (ft. lbs.)

| 1st Stage | 2nd Stage | 3rd Stage |
|---|---|---|
| | | |

| Wheel Size | 1st Stage | 2nd Stage | 3rd Stage |
|---|---|---|---|
| 12" | 20-25 | 35-40 | 50-75 |
| 13" | 20-25 | 35-40 | 50-75 |
| 14" | 20-25 | 50-60 | 90-120 |
| 15" | 20-25 | 50-60 | 90-120 |
| 16" | 20-25 | 50-60 | 90-120 |
| 16.5" x 6.75" | 20-25 | 50-60 | 90-120 |
| 16.5" x 9.75" | 55-60 | 120-125 | 175-225 |
| 14.5" Demount. | Tighten sequentially to | | 85-95 |
| 17.5" Hub Pilot Clamp Ring & Cone Nuts | 50-60 | 100-120 | 190-210 |
| 17.5" Hub Pilot 5/8" Flange Nuts | 50-60 | 190-200 | 275-325 |

## Torque Sequence

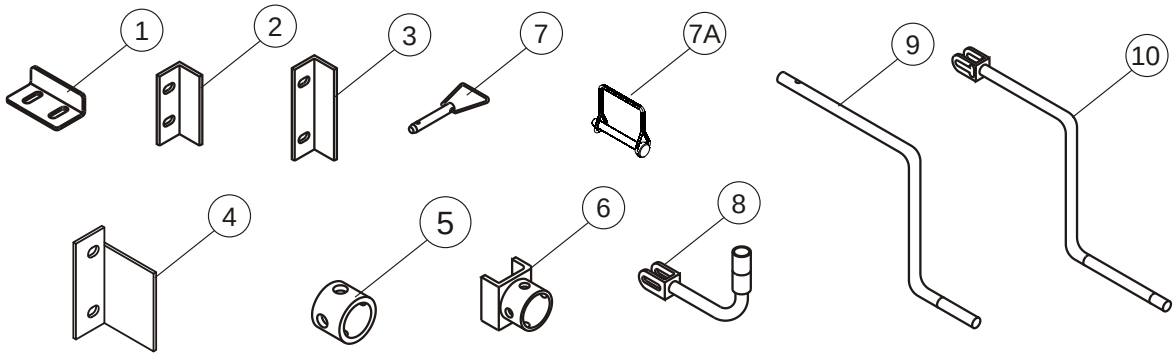


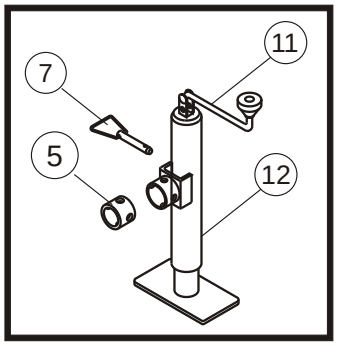
# SECTION 3

# Tongue Parts


| | |
|---|---|
| Jacks | 3.1-3.2 |
| Hitches & Couplers | 3.3 |
| Hydraulic Actuators | 3.4-3.5 |
| Dexter Electric/ Hydraulic Actuator | 3.6 |
| Lighting, Battery, and Battery Boxes | 3.7 |

# Jacks



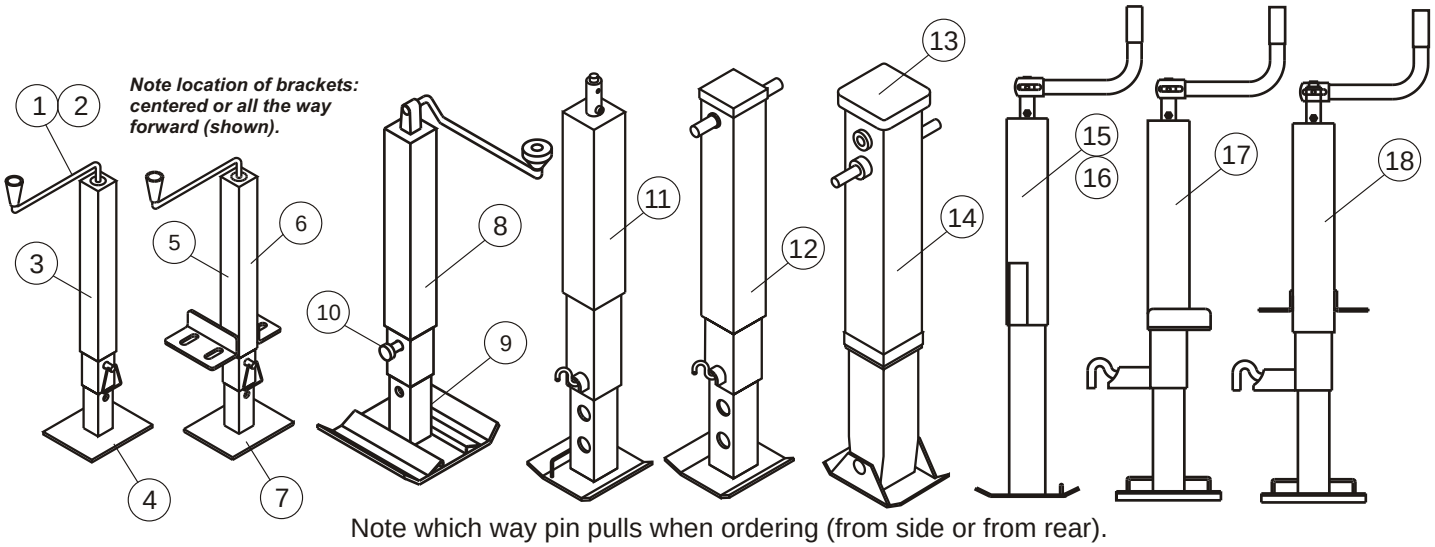




***5K Jack Assembly***

Note which way pin pulls when ordering (from side or from rear).

| Item | Part # | Description |
|---|---|---|
| 1 | 06-0535 | 6" mounting bracket (formed) |
| 2 | 01-0060 | 6" mounting bracket (2 x 2 angle) |
| 3 | 01-0062 | 8" mounting bracket (2 x 2 angle) |
| | 01-0063 | 8" mounting bracket (5 x 3 angle) |
| 4 | 06-1690 | special mounting bracket (25K jacks) |
| 5 | 33-5013 | mounting bracket, male (5K swing-up jack) |
| 6 | 33-5011 | mounting bracket, female (5K swing-up jack) |
| 7 | 37-0230 | replacement pin, 7K drop-leg jack, 5K swing-up jack |
| 7a | 33-5156 | 5/8 x 3 3/8 Butler jack pin |
| 8 | 33-5034 | replacement jack hand (12K top wind jack) |
| 9 | 33-5031 | jack handle |
| 10 | 33-5045 | jack handle |
| 11 | 33-5009 | replacement handle only, 5K swing-up jack |
| 12 | 33-5075 | 5K swing-up jack, complete with mounting brackets |

# Jacks




Note which way pin pulls when ordering (from side or from rear).

| Item | Part # | Description |
|---|---|---|
| | | |
| 1 | 33-5021 | replacement handle only, 7K drop-leg jack |
| 2 | 33-5154 | replacement handle for Butler 7K drop-leg jack |
| 3 | 33-5020 | 7K drop-leg jack, 10", with handle, base and pin |
| | 33-5019 | 7K drop-leg jack, 15", with handle, base and pin |
| 4 | 33-5023 | replacement base only, 7K drop-leg jack |
| 5 | 33-5022 | 7K drop-leg jack, complete assembly with 6" formed brackets (10" jack) |
| 6 | 33-5018 | 7K drop-leg jack, complete assembly with 6" formed brackets (15" jack) |
| 7 | 33-5155 | Buttler jack base |
| 8 | 33-5150 | 10K top-wind jack |
| 9 | 33-5151 | leg only for 10K top-wind jack |
| 10 | 33-5152 | pin only for 10K top-wind jack |
| | 12-0564 | 10K top-wind jack with 6" formed brackets |
| 11 | 33-5036 | 12K top-wind jack only |
| 12 | 33-5037 | 12K drop-leg jack only, long, side wind (specify side pull or front pull drop-leg pin) |
| | 33-5033 | 12K drop-leg jack with 6" angle iron brackets, side wind |
| | 33-5035 | 12K drop-leg jack with 8" angle iron brackets, side wind |
| 13 | 33-5051 | plastic replacement top only, with bolts (for 25K Jost jack) |
| 14 | 33-5049 | 25K, 2 speed jack |
| | 33-5047 | 25K, 2 speed jack with 2 x 2 x 8" long angle iron brackets |
| | 33-5046 | 25K, 2 speed jack with 5 x 3 x 8" long angle iron brackets |
| 15 | 33-5038 | 12K top-wind jack, 6" vertical brackets (B-8PRS, B-9PRS stabilizer jack) |
| 16 | 33-5028 | 12K top-wind jack, 8" vertical brackets (large DD's) |
| 17 | 33-5042 | 12K top-wind jack, 6" formed brackets, rear pull pin, for B-5P |
| 18 | 33-5040 | 12K top-wind jack, 6" formed brackets, left hand pull pin (small DD models, B-5T-->B-7T) |
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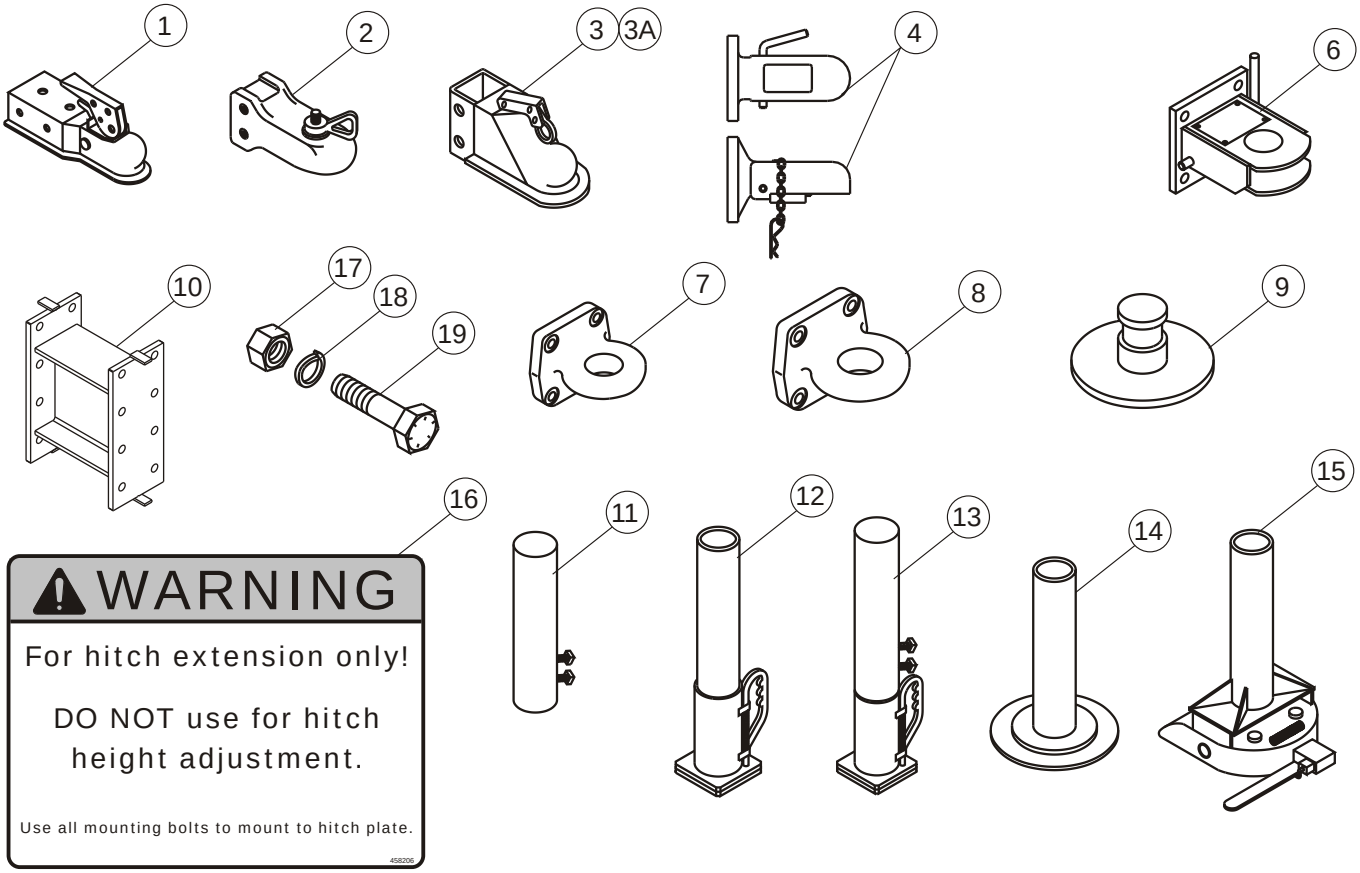
# Hitches and Couplers




| Item | Part # | Description |
|---|---|---|
| 1 | 33-7042 | 2" ball coupler, for 3" square |
| | 33-7044 | repair kit for 2" ball coupler (33-7042) |
| 2 | 33-0006 | 2" ball coupler, cast, 2 bolt |
| | 33-0008 | repair kit for 2" cast ball coupler (33-0006) |
| 3 | 33-0010 | 2 5/16" ball coupler, fits inside adjustment channel |
| 3A | 33-0009 | 2" ball coupler, fits inside adjustment channel |
| | 33-0012 | repair kit for 2" ball coupler and 2 5/16" ball couplers |
| 4 | 33-0015 | 2 5/16" ball coupler, 4 bolt, 25,000 lb. capacity (Wallace-Forge) |
| | | |
| 6 | 33-0035 | 2 5/16" ball coupler (25,000 lb. capacity) |
| 7 | 33-0004 | 2 1/2" i.d. pintle ring, 4 bolt |
| 8 | 33-0050 | 3" i.d. pintle ring, 4 bolt |
| 9 | 33-2809 | 2" king pin |
| 10 | 12-0340 | 12" hitch extension, any model with 4 bolt pintle ring, 24,000 lb. capacity (Do not use for hitch height adjustment!) |
| | 12-0342 | 12" hitch extension, heavy duty (Do not use for hitch height adjustment!) |
| 11 | 33-0029 | replacement outer tube assembly (for goosenecks) |
| 12 | 33-0028 | 2 5/16" coupler, inner section only |
| 13 | 33-0027 | 2 5/16" coupler, complete assembly (30,000 lb. capacity) |
| 14 | 33-0030 | 2" king pin assembly, inner section only |
| 15 | 33-0032 | inverted 5th wheel assembly, inner section only |
| 16 | 45-8206 | decal, warning, hitch extension, FOR USE w/ P/N 120340 OR 120342 |
| 17 | 36-0402 | nut, 5/8" n.c., grade 8 |
| 18 | 36-0408 | washer, 5/8", lock, grade 8 |
| 19 | 36-0403 | bolt, 5/8" x 1 1/2", n.c., gr. 8 |
| | 36-0132 | bolt, 5/8" x 2 1/4", n.c., gr. 8 |
| | 36-0400 | bolt, 5/8" x 4 1/2", n.c., gr. 8 |
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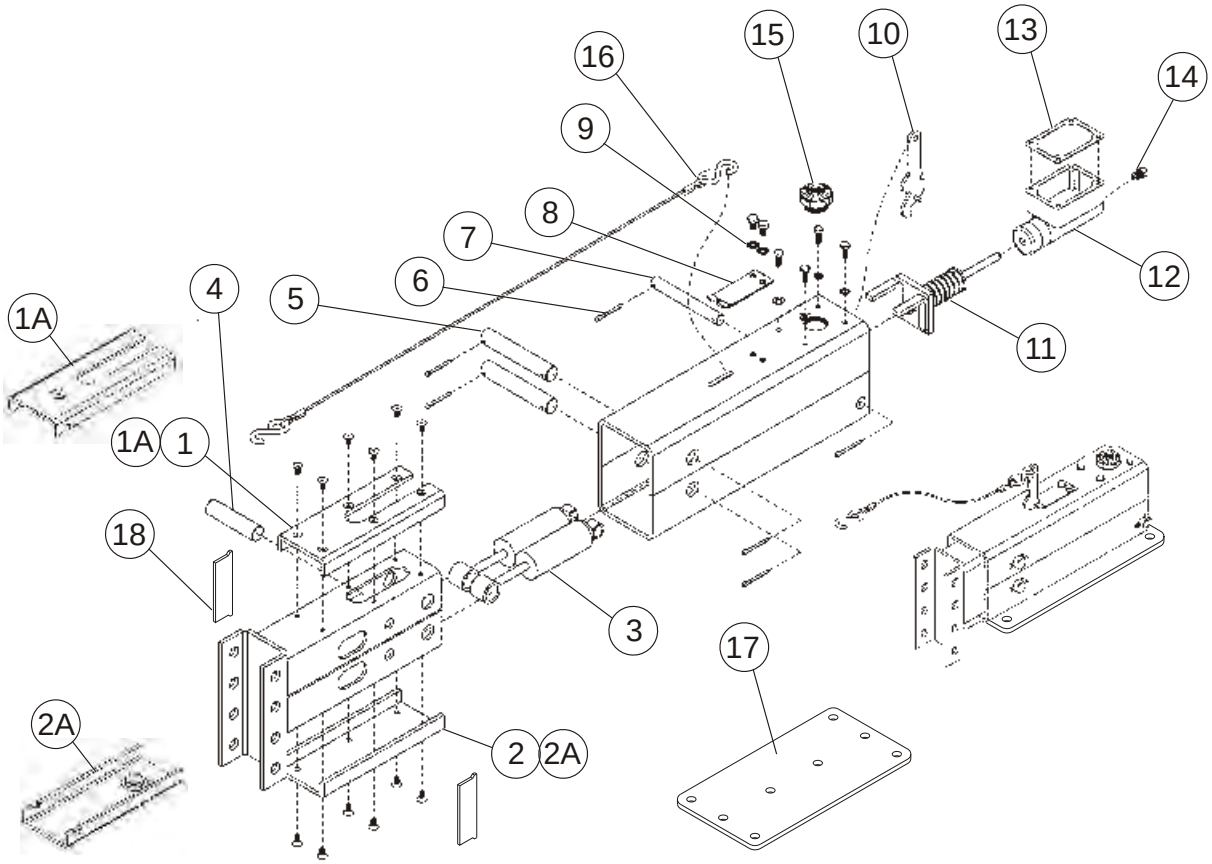
# Hydraulic Actuator (DA10)




| Item | Part # | Description |
|---|---|---|
| | 35-2090 | 10,000 lb. actuator, complete assembly w/ plate |
| | | |
| 1 | 35-2103 | top wear pad, old style without notch |
| 1A | 35-2104 | top wear pad, new style with notch |
| 2 | 35-2105 | bottom wear pad, old style without notch |
| 2A | 35-2106 | bottom wear pad, new style with notch |
| 3 | 35-2006 | damper shock |
| 4 | 35-2107 | front shock pin |
| 5 | 35-2109 | connecting pin |
| 6 | 37-0237 | 5/32" x 1 1/2" cotter pin |
| 7 | 35-2111 | rear shock pin |
| 8 | 35-2014 | emergency lever spring |
| 9 | 36-0103 | 5/16" external tooth lock washer |
| 10 | 35-2016 | emergency lever |
| 11 | 35-2113 | push rod assembly |
| 12 | 35-2020 | master cylinder |
| 13 | 35-2022 | replacement master cylinder gasket |
| 14 | 35-2024 | 1/8" pipe - 3/16" inverted flare fitting |
| 15 | 35-2026 | master cylinder cap |
| 16 | 35-2028 | 3/32" cable with hooks on both ends |
| 17 | 06-0966 | plate only, actuator mount |
| 18 | 35-3910 | spacer block |
| | | |
| | 35-2030 | emergency lever guard (not shown) |
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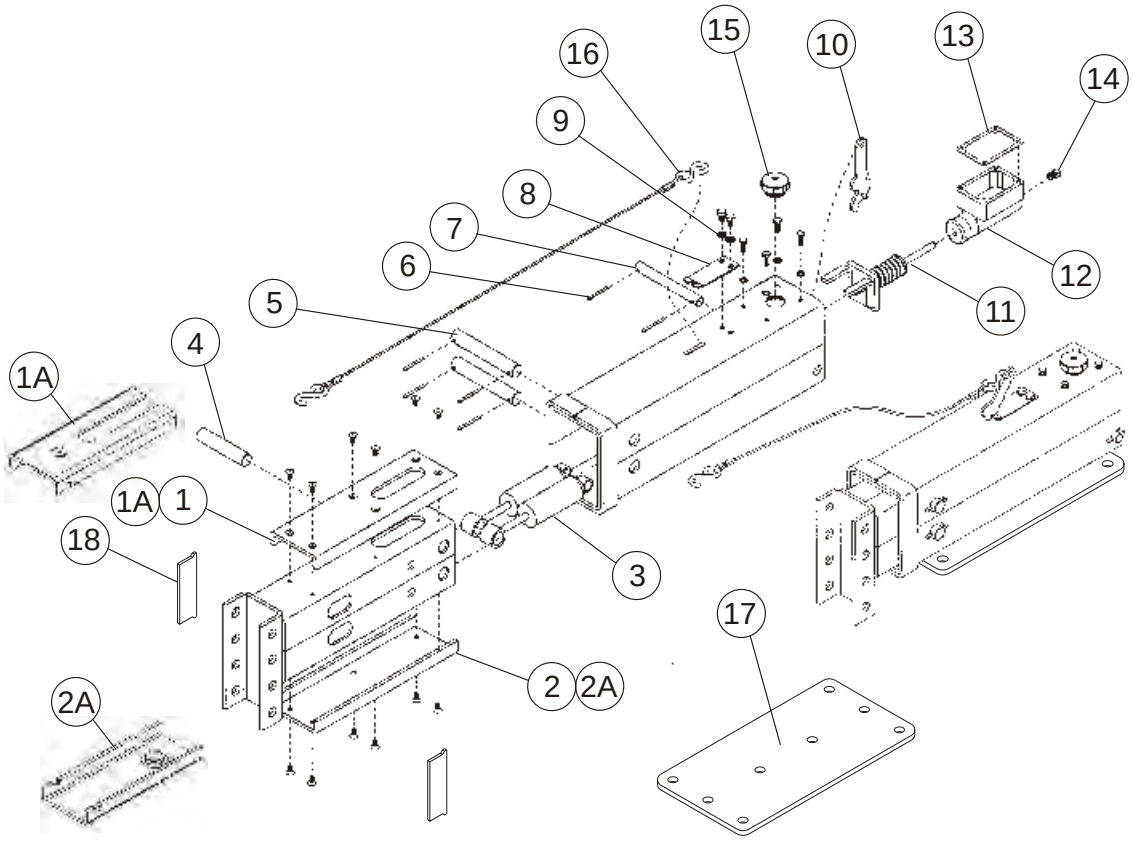
# Hydraulic Actuator (DA20)




| Item | Part # | Description |
|---|---|---|
| | 35-2080 | 20,000 lb. actuator, complete assembly w/ plate |
| | | |
| 1 | 35-2002 | top wear pad, old style without notch |
| 1A | 35-2003 | top wear pad, new style with notch |
| 2 | 35-2004 | bottom wear pad, old style without notch |
| 2A | 35-2005 | bottom wear pad, new style with notch |
| 3 | 35-2006 | damper shock |
| 4 | 35-2008 | front shock pin |
| 5 | 35-2010 | connecting pin |
| 6 | 37-0237 | 5/32" x 1 1/2" cotter pin |
| 7 | 35-2012 | rear shock pin |
| 8 | 35-2014 | emergency lever spring |
| 9 | 36-0103 | 5/16" external tooth lock washer |
| 10 | 35-2016 | emergency lever |
| 11 | 35-2018 | push rod assembly |
| 12 | 35-2020 | master cylinder |
| 13 | 35-2022 | replacement master cylinder gasket |
| 14 | 35-2024 | 1/8" pipe - 3/16" inverted flare fitting |
| 15 | 35-2026 | master cylinder cap |
| 16 | 35-2028 | 3/32" cable with hooks on both ends |
| 17 | 06-0966 | plate only, actuator mount |
| 18 | 35-3910 | spacer block |
| | | |
| | 35-2030 | emergency lever guard (not shown) |
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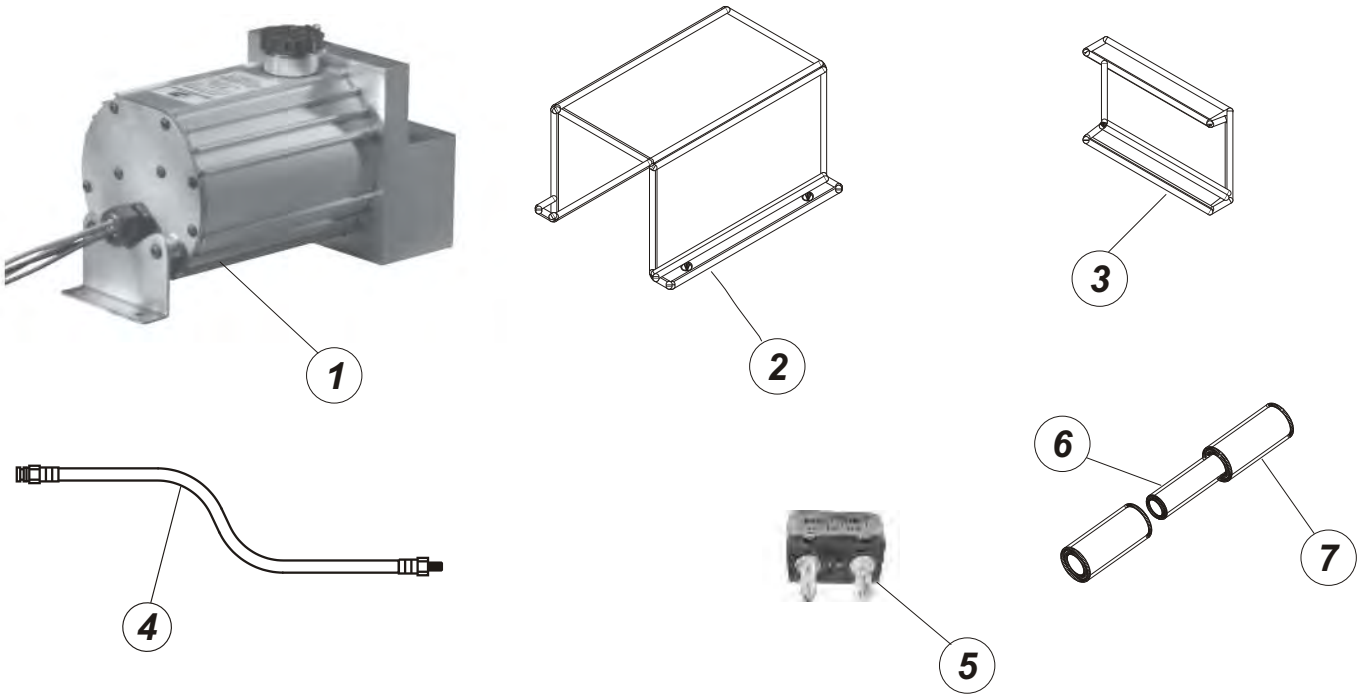
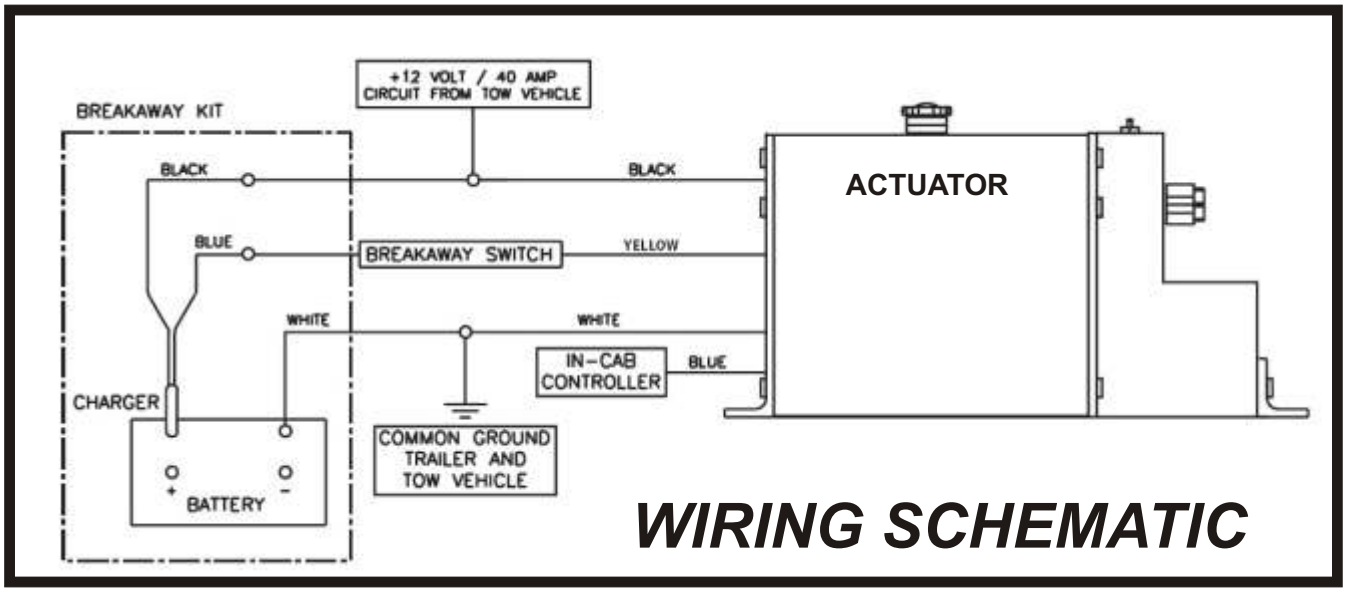
# Dexter Electric/Hydraulic Actuator




| Item | Part # | Description |
|---|---|---|
| | | |
| 1 | 35-5031 | Actuator |
| 2 | 06-6052 | Cover |
| 3 | 03-2015 | Mounting Plate for Gooseneck Models |
| 4 | 35-3012 | Long steel hyd. line (from actuator to axles) |
| 5 | 39-6401 | 12Volt/ 30Amp Breaker |
| 6 | 07-0006 | Hinge Rod |
| 7 | 08-0028 | Hinge |
| | | |
| | 35-3000 | Complete Hydraulic Line Fitting Kit |
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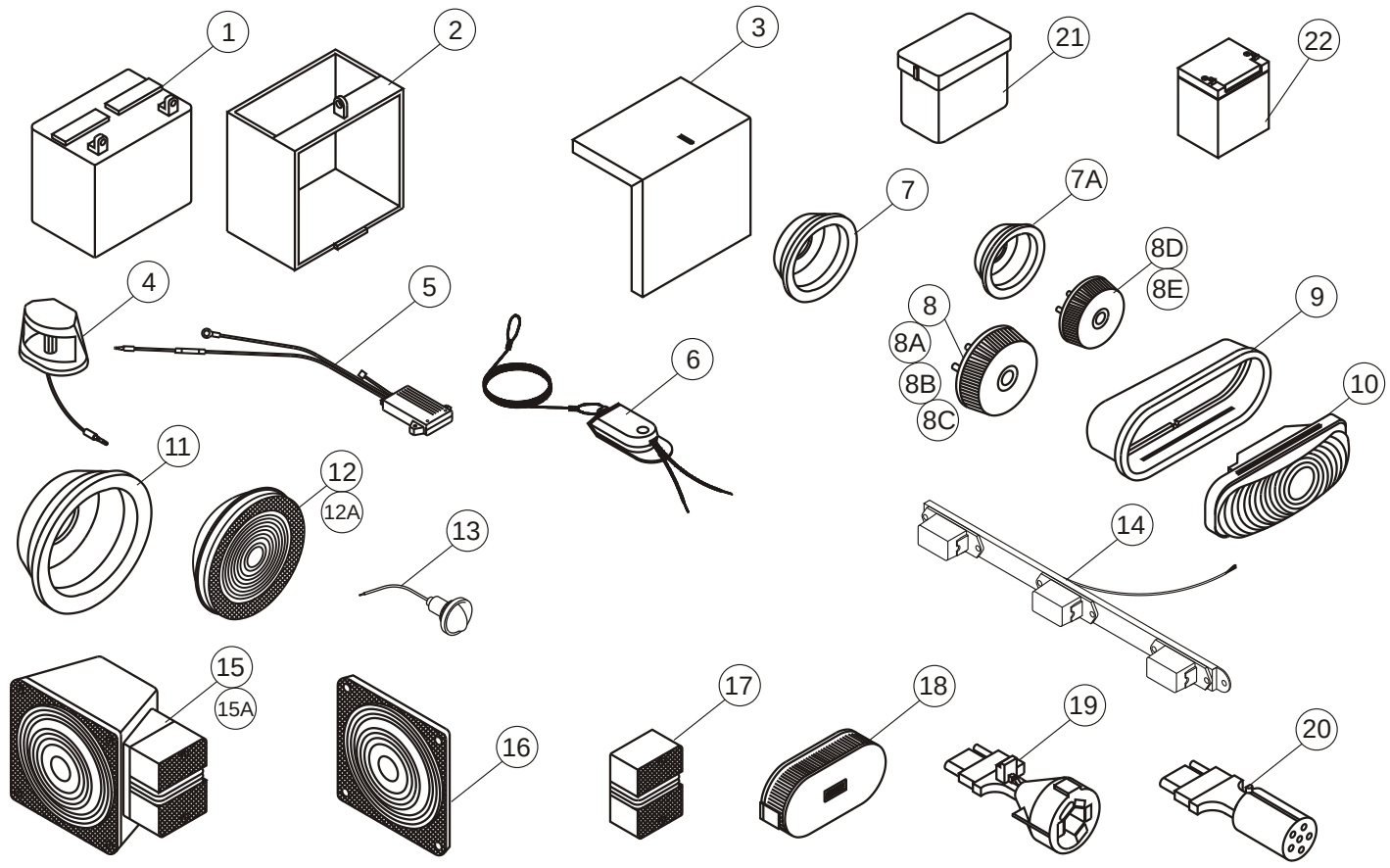
# Lighting, Batteries, Battery Boxes




| Item | Part # | Description | | |
|---|---|---|---|---|
| 1 | 35-1800 | 12V wet cell battery (cannot ship UPS) | | |
| 2 | 35-1803 | stainless steel battery box bottom only | | |
| 3 | 35-1802 | stainless steel battery box lid only | | |
| | 35-1801 | stainless steel battery box (bottom and lid) | | |
| 4 | 39-3011 | license plate i.d. light | | |
| 5 | 35-1804 | tow charger | | |
| 6 | 35-0201 | break-a-way switch | | |
| 7 | 39-3005 | marker light mounting grommet, 2 ½"round, recessed mount | | |
| 7A | 39-0158 | marker light mounting grommet, 2" round, recessed mount (BE-5P, "DDB & "BL" tailboard only) | | |
| 8 | 39-3007 | amber marker light, 2 ½"round | | |
| 8A | 39-2745 | amber marker light, 2 ½"round L.E.D. | | |
| 8B | 39-3009 | red marker light, 2 ½"round | | |
| 8C | 39-2740 | red marker light, 2 ½"round L.E.D. | | |
| 8D | 39-0156 | red marker light, 2" round (BE-5P, "DDB" & "BL" tailboard only) | | |
| 8E | 39-0156 | red marker light, 2" round L.E.D. (BE-5P, "DDB" & "BL" tailboard only) | | |
| 9 | 39-3001 | tail light mounting grommet | | |
| 10 | 39-3003 | tail light | | |
| 10A | 39-2760 | tail light L.E.D. | | |
| 11 | 39-3022 | tail light mounting grommet, 4 1/2" round | | |
| 12 | 39-3016 | tail light, 4 1/2" round | | |
| 12A | 39-3016A | tail light, 4 1/2" round L.E.D | 35-0909 | Carlisle brake controller |
| 13 | 39-3008 | license plate i.d. light (pop-in style) | 35-0230 | battery for Carlisle system |
| 14 | 39-3019 | 1" tri-light bar | 39-6240 | remote switch for Carlisle system |
| 15 | 39-3013A | r.h. tail light (replaces 39-3013 & 39-3029) BE-1T only | 35-1808 | break-away battery charger system |
| 15A | 39-3015A | l.h. tail light (replaces 39-3015 & 39-3028) BE-1T only | 35-1810 | battery box for Carlisle system |
| 16 | 39-3017A | tail light replacement lense only | | |
| 17 | 39-3025A | side light replacement lense only | | |
| 18 | 39-3021 | amber front marker light | | |
| | 39-3023 | amber front marker light replacement lense only | | |
| 19 | 39-0051 | adapter, 7-way RV receptacle to 4-way flat | | |
| 20 | 39-0056 | adapter, 6-way round to 4-way flat | | |
| 21 | 35-0211 | plastic battery box, for small gel-cell sealed battery | | |
| 22 | 35-0203 | 12V sealed battery | | |
| | | | | |
| | | | | |

# SECTION 4

# Wiring Parts


Wiring Harness 4.1-4.5

Wiring Circuits 4.6


4

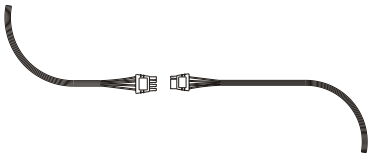
# Wiring Harness

**Used on these models: BE-3.5, BE-3.5A, BE-5, BE-5P, BE-6P, BE-5A, BE-7, BE-5BL, BE-6BL, BE-7**

**Model B-1T uses its own harness: p/n 39-0201 (not shown).**

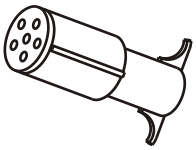
Note: Line up arrows on harness for proper installation.

390011 - 4-way trailer end lead only with 12" wire

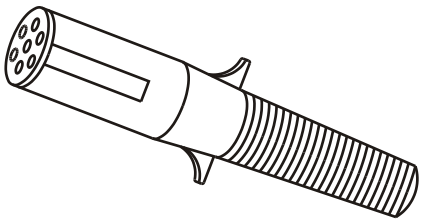


p/n: 390016 - 4-way truck end lead only with 48" wire

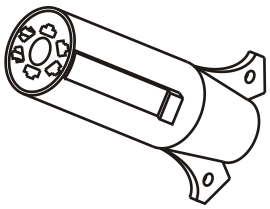
395005 - 6 pole trailer plug only



399023 - 7 pole trailer plug only

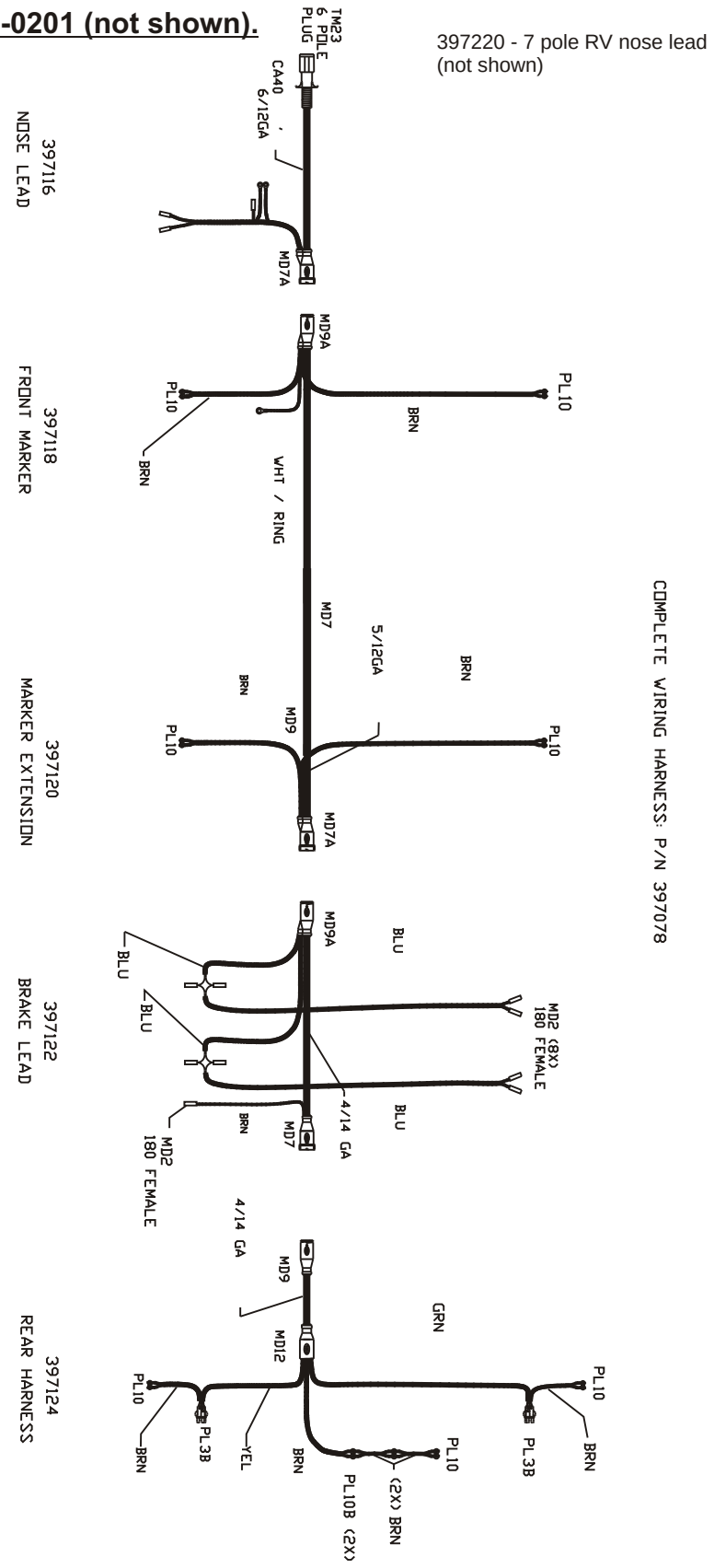


390046 - RV trailer plug only



397202 - locking ring (not shown)

397220 - 7 pole RV nose lead (not shown)



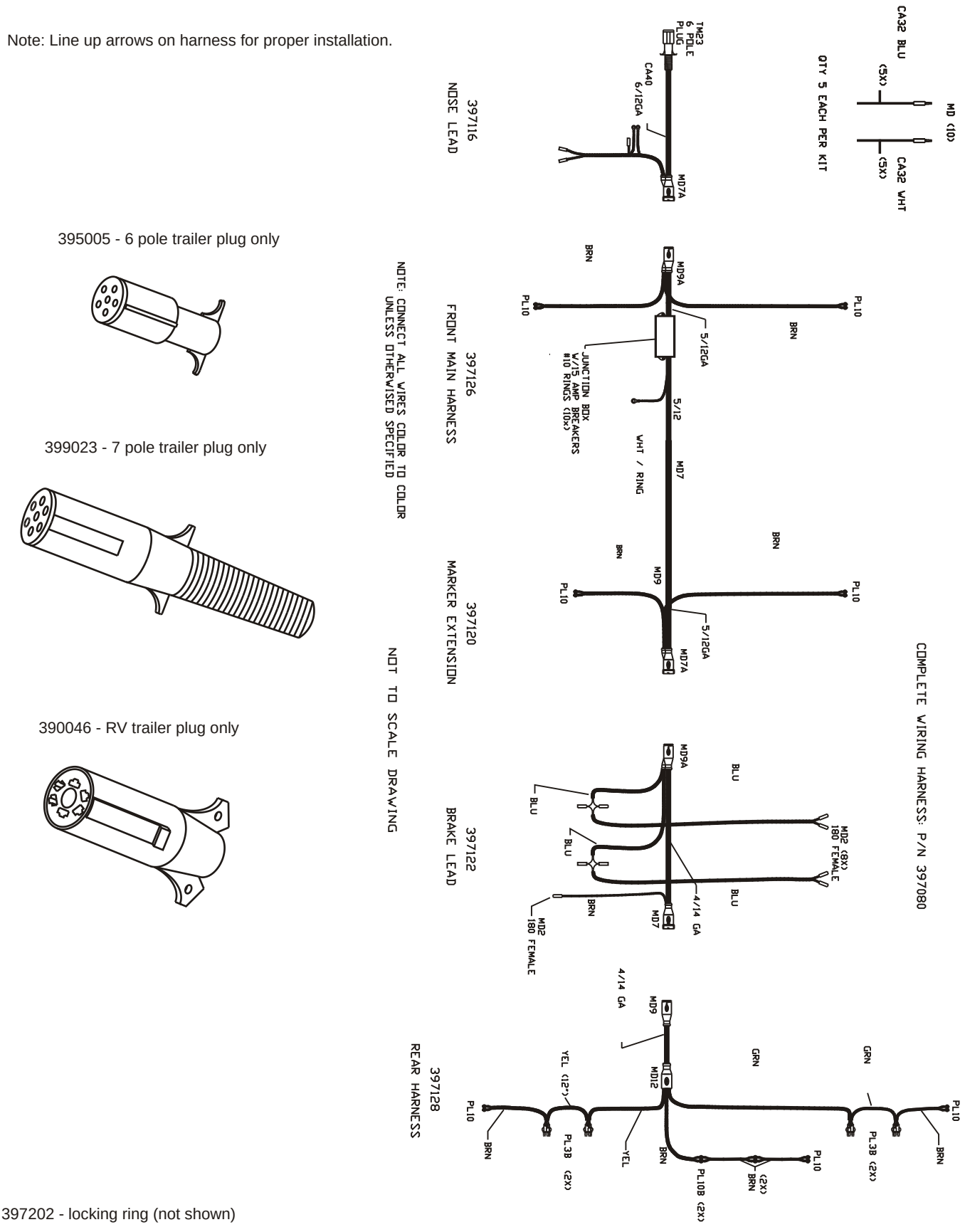

NOTE: CONNECT ALL WIRES COLOR TO COLOR, UNLESS OTHERWISE SPECIFIED. DRAWING IS NOT TO SCALE.

# Wiring Harness

## Used on these models: B-1.75T, B-2.5T, B-3.5P, B-5P, B-5, B-6

397220 - 7 pole RV nose lead (not shown)

Note: Line up arrows on harness for proper installation.




395005 - 6 pole trailer plug only



399023 - 7 pole trailer plug only



390046 - RV trailer plug only



397202 - locking ring (not shown)

# Wiring Harness

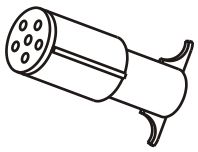
## Used on these models: B-7, B-8, B-9, B-9B, B-8PRS, B-9PRS, B-7B, B-8B, B-9B

**Complete wiring harness: p/n 397098**

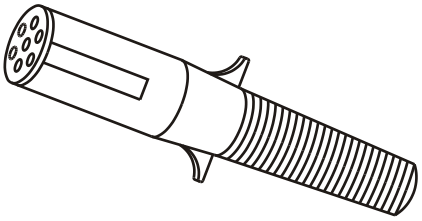
397220 - 7 pole RV nose lead (not shown)

Note: Line up arrows on harness for proper installation.

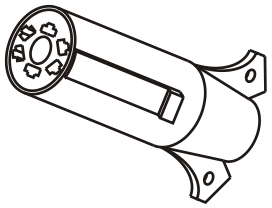
395005 - 6 pole trailer plug only

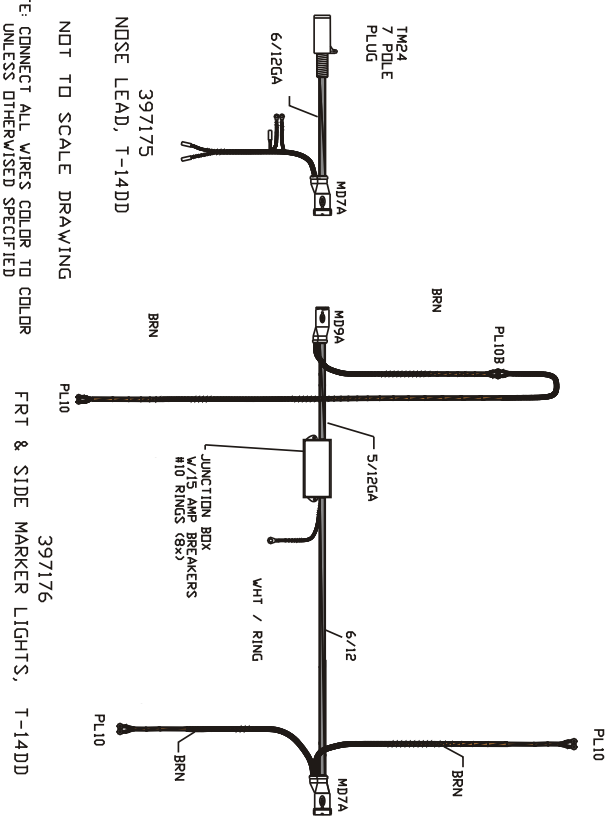


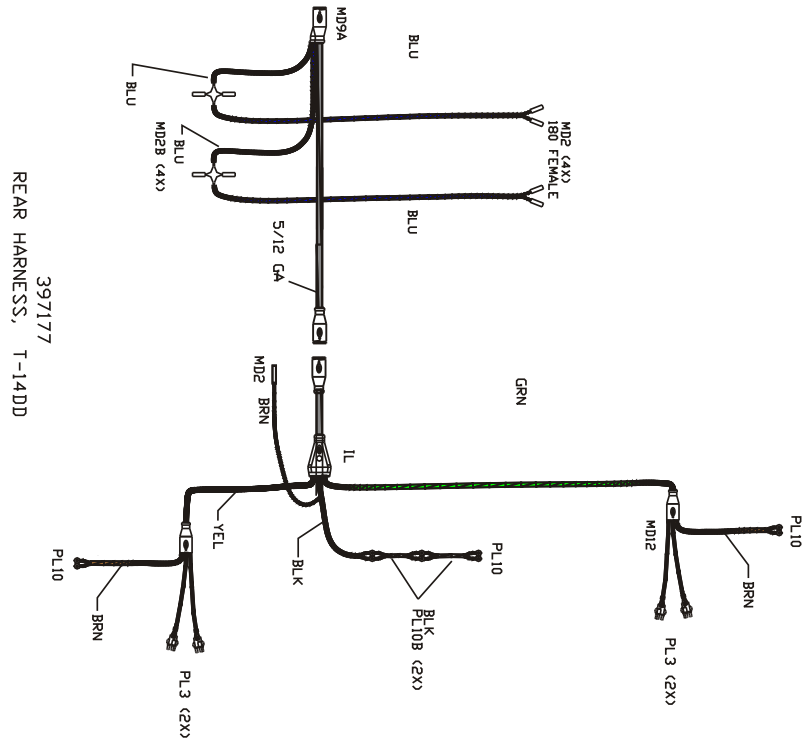
399023 - 7 pole trailer plug only



390046 - RV trailer plug only





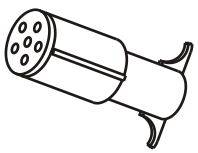

397202 - locking ring (not shown)

# Wiring Harness

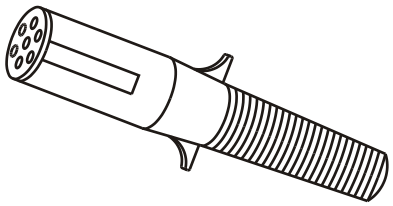
## Used on these models: B-5T, B-6T, B-7T

Note: Line up arrows on harness for proper installation.

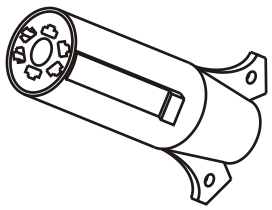
395005 - 6 pole trailer plug only



399023 - 7 pole trailer plug only

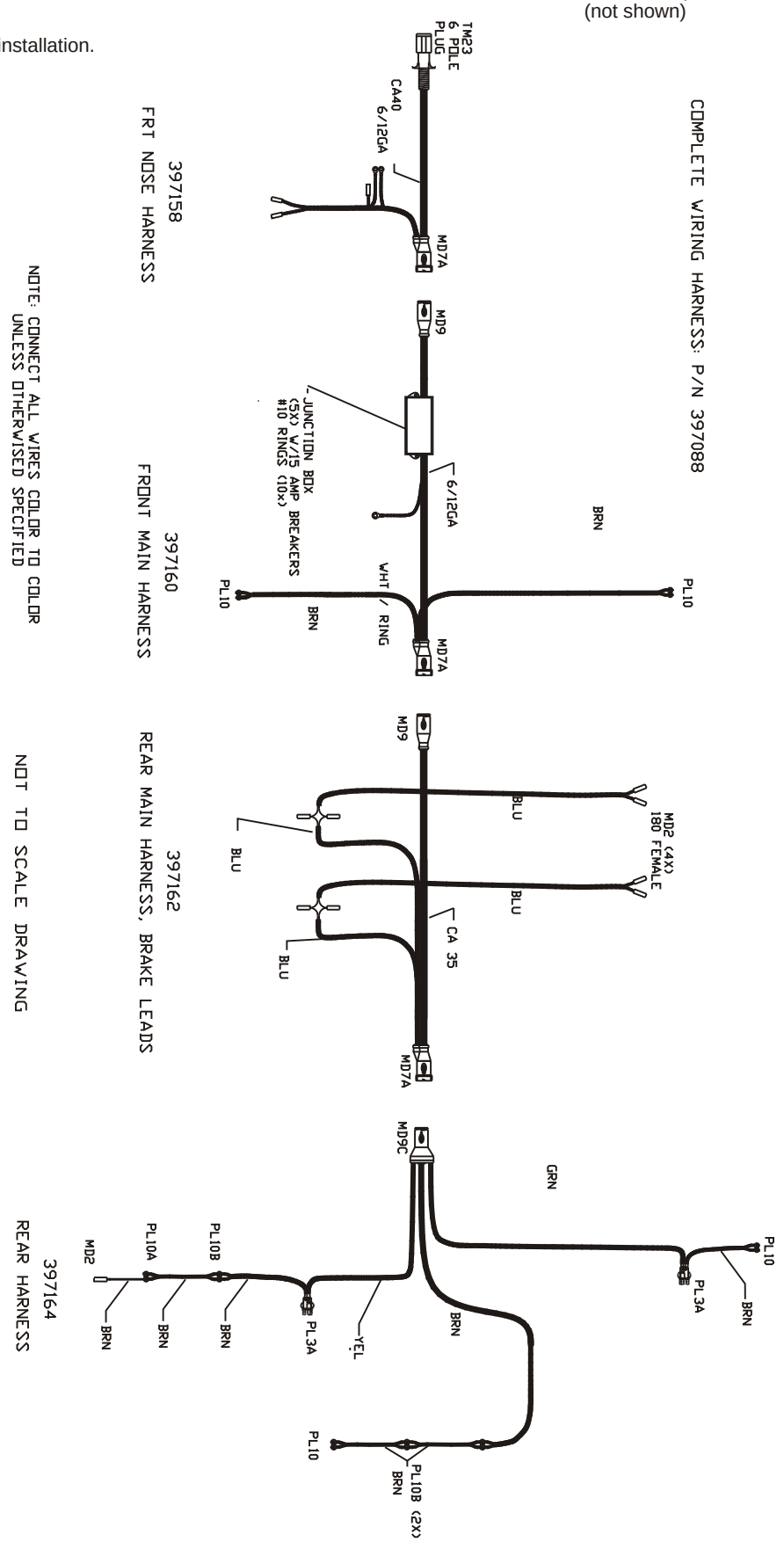


390046 - RV trailer plug only



397202 - locking ring (not shown)

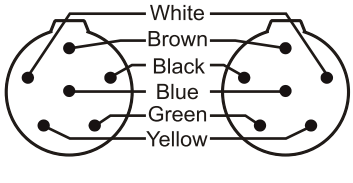
397220 - 7 pole RV nose lead (not shown)



# Wiring Circuits

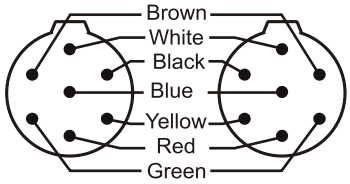
**Note: Locate wires by function only. Color coding is not standard among all manufacturers.**

## 6 Pole *USA HARNESS || 7 Pole Electric Brakes Only*




***Trailer Plug p/n 39-5005*** — ***Truck Receptacle p/n 39-5006***

| | |
|---|---|
| white | ground |
| brown | tail lights |
| black | accessory |
| blue | brakes |
| green | right turn |
| yellow | left turn |




***Truck Receptacle p/n 39-9025*** — ***Trailer Plug p/n 39-9023***

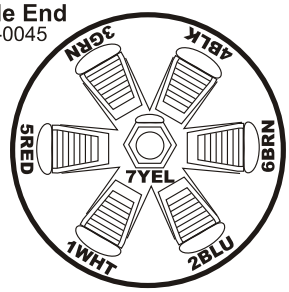
| | |
|---|---|
| brown | tail, clearance, side marker and license plate lights |
| white | ground |
| blue | accessory |
| black | electric brakes |
| yellow | left turn |
| red | stop lights |
| green | right turn |

***NOTE: The contacts are identified by looking into the open end of either the truck receptacle or trailer plug. 6 & 7 pole.***

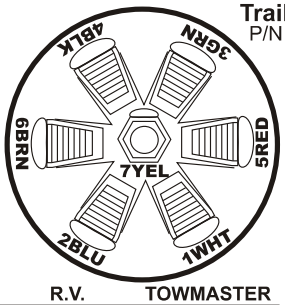
**451407**

## 7-Pole RV Connector

**Vehicle End**
P/N 39-0045




**Trailer End**
P/N 39-0044

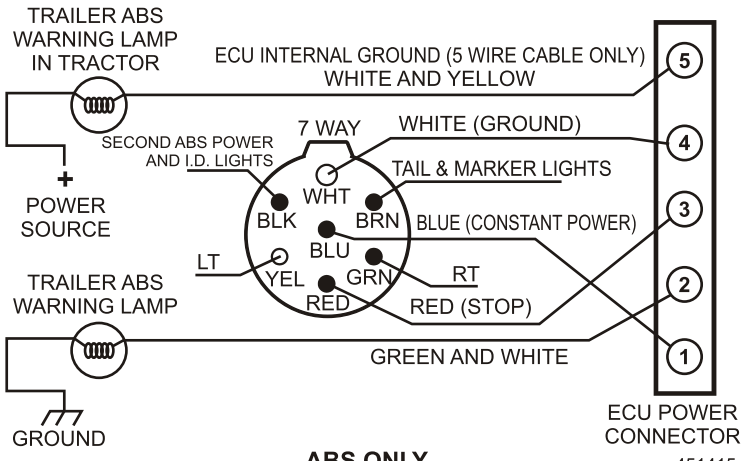



| | R.V. | TOWMASTER |
|---|---|---|
| 1. GROUND | WHITE | WHITE |
| 2. ELECTRIC BRAKES | BLUE | BLUE |
| 3. TAIL, RUNNING LIGHTS | GREEN | BROWN |
| 4. BATTERY | BLACK | |
| 5. L.H. STOP & TURN | RED | YELLOW |
| 6. R.H. STOP & TURN | BROWN | GREEN |
| 7. AUXILIARY | YELLOW | BLACK |

**45-3308**

## AIR BRAKE SYSTEM WIRING

**4 OR 5 WIRE SCHEMATIC**




**ABS ONLY**

451415

# SECTION 5

# Ramp & Fender Parts

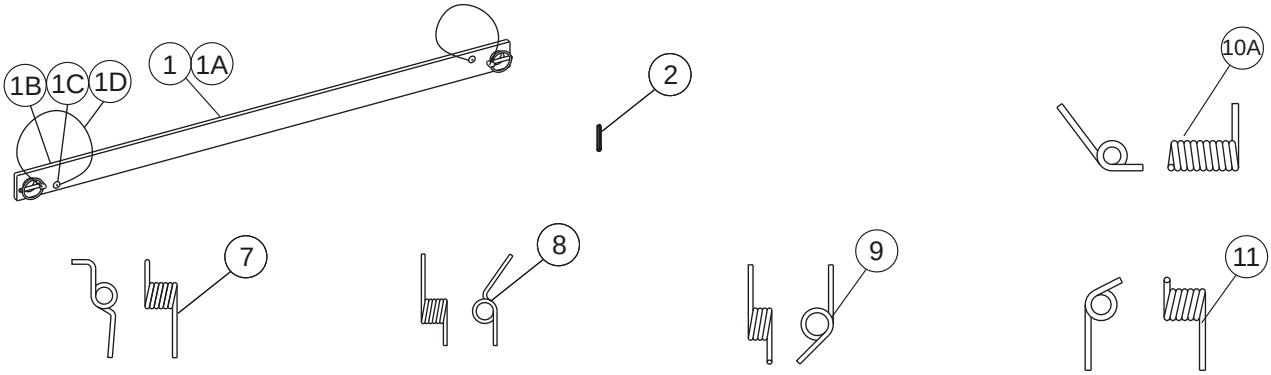

| | |
|---|---|
| Ramp Rods, Spring, Mounts, Auto- Latch | 5.1-5.2 |
| Ramps | 5.3-5.4 |
| Fenders & Light Boxes | 5.5-5.6 |

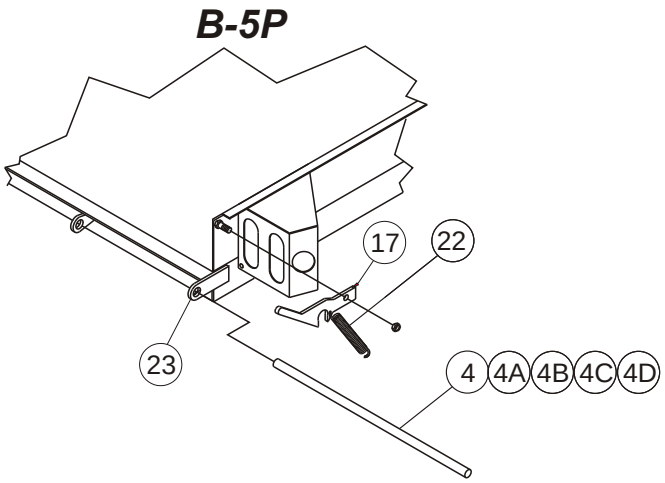

5

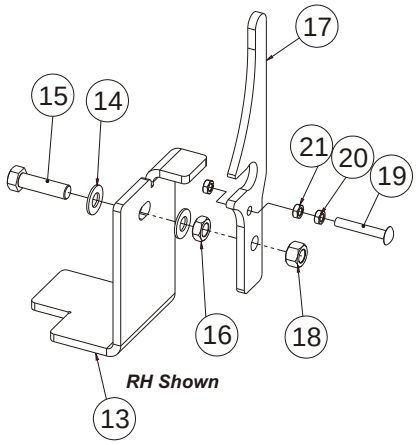
# Ramp Rods, Springs, Mounts and Auto-Latch

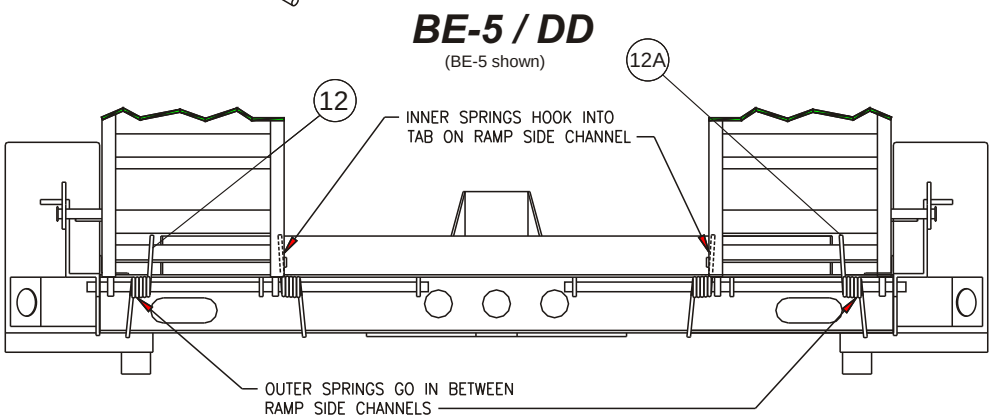
| Item | Part # | Description |
|---|---|---|
| 1 | 16-6283 | ramp hold-up bar Assembly |
| 1A | 05-0608 | ramp hold up bar, 38”long |
| 1B | 37-0596 | washer, 3/16” |
| 1C | 37-0603 | rivet, 3/16” |
| 1D | 37-3150 | 1/4” lynch pin w/chain |
| | | |
| 2 | 37-0234 | roll pin, 5/16" x 1 1/2" |
| | 37-0235 | roll pin, 5/16" x 3" |
| | | |
| 4 | 16-0070 | ramp rod, 1" x 38 ½" (07-0037) |
| 4A | 16-0073 | ramp rod, full width, 1" x 79" (07-0013) pan trailers |
| 4B | 16-0072 | ramp rod, full width, 1” x 83 ½” (07-0213) DD |
| 4C | 16-0024 | stress proof ramp rod, 1 1/2" x 33 ½" (07-0018) large DD |
| 4D | 16-0027 | stress proof ramp rod, 1 1/2" x 29 ½" (07-0042) large DD |
| | | |
| 7 | 37-0545 | ramp helper spring, 3/8” for 1" ramp rod, B-5P |
| 8 | 37-0550 | ramp helper spring, 3/8” for 1" ramp rod, l.h. only (old style small DD) |
| | 37-0555 | ramp helper spring, 3/8” for 1" ramp rod, r.h. only (old style small DD) |
| 9 | 37-0590 | ramp helper spring, 3/8” for 1 ½”ramp rod (large DDB's) |
| 10A | 37-0622 | ramp helper spring, 5/8” for 1” ramp rod, full width ramp (small DD models) |
| 11 | 37-0592 | ramp helper spring, 5/8” for 1 ½”ramp rod (large DD’s w/o beavertail) |
| 12 | 37-0560 | ramp helper spring, 3/8” for 1” ramp rod, l.h. (new style small DD) |
| 12A | 37-0561 | ramp helper spring, 3/8” for 1” ramp rod, r.h. (new style small DD) |
| | | ® |
| 13 | 06-6895 | latch handle mount, auto-latch, BE-10, B-5DD LH |
| | 06-6221 | latch handle mount, auto-latch, BE-10, B-5DD RH |
| | 06-3118 | latch handle mount, BE-5BL,BE-6BL models (specify l.h. or r.h.) |
| | 06-1918 | latch handle mount, BE-5LS, BE-6LS only (specify l.h. or r.h.) |
| 14 | 36-0406 | 5/8”washer |
| 15 | 36-0132 | 5/8”-11UNC x 2-1/4” GR.8 Nut |
| 16 | 36-0033 | 5/8 Jam Nut |
| 17 | 06-1384 | Latch Handle (all Auto-Latch models) |
| 18 | 36-0409 | 5/8 Lock Nut |
| 19 | 36-1013 | 3/8 x 2 ½”carriage bolt |
| 20 | 36-0035 | 3/8” center lock nut |
| 21 | 36-0120 | 3/8”Jam Nut |
| | | |
| 22 | 37-0535 | latch handle return spring |
| 23 | 06-0262 | replacement ramp ear, for trailer |
| 32 | 12-1591 | replacement auto-latch pin with washer (1" x 4 1/2") |
| 33 | 12-1595 | replacement auto-latch pin with washer and gusset, r.h. (1" x 5 3/4") |
| 34 | 12-1598 | replacement auto-latch pin with washer and gusset, l.h. (1" x 5 3/4") |
| 35 | 06-1151 | replacement ramp ear, large DD's, 6" |
| 36 | 06-1749 | replacement ramp ear, 9.58", for 3" channel |
| 37 | 06-0083 | replacement ramp ear, 6" |
| 38 | 06-2573 | replacement ramp ear, 8" |
| 39 | 06-0085 | replacement ramp ear, 4", |
| 40 | 06-1748 | replacement ramp ear, 9 1/2" |
| 41 | 06-3488 | replacement ramp ear, 9.58", for 4" channel |

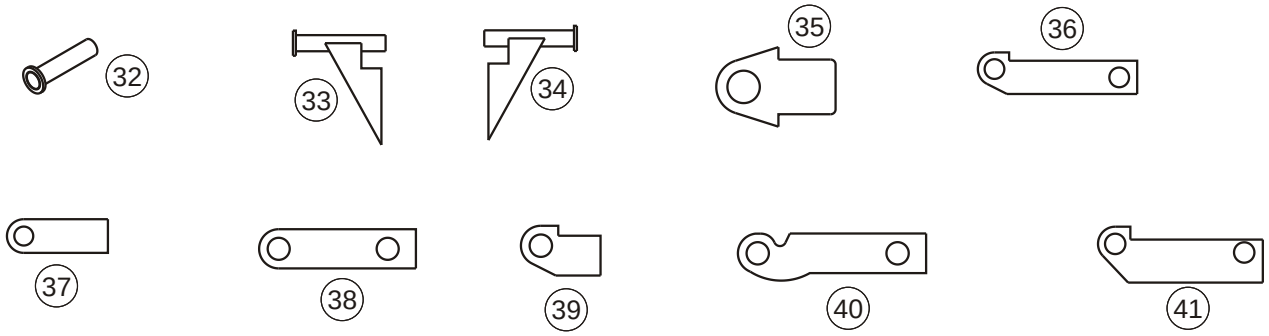
# Ramp Rods, Springs, Mounts and Auto-Latch



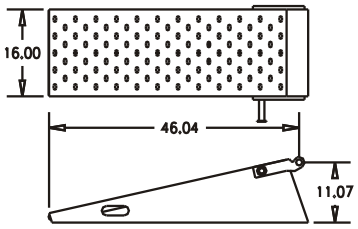



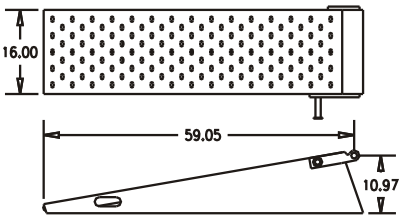



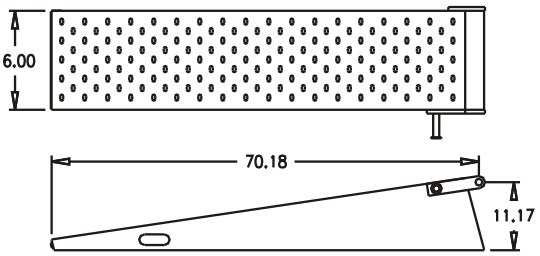
# Ramps



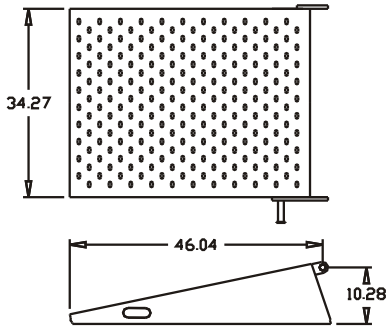

161750 L.H.
161751 R.H. (shown)
B-5P, 4 ft. punch top,
auto-latch (121450)



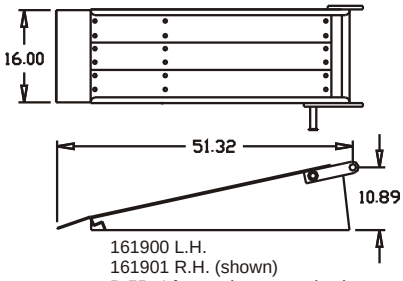

161930 L.H.
161931 R.H. (shown)
B-5P, 5 ft. punch top,
auto-latch (121452)



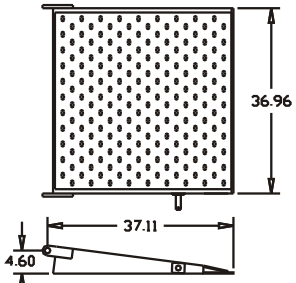

161940 L.H.
161941 R.H. (shown)
B-5P, 6 ft. punch top
auto-latch (121453)



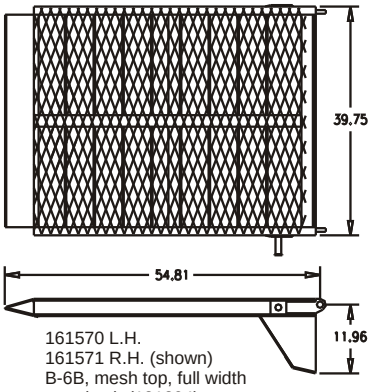

161910 L.H.
161911 R.H. (shown)
B-5P, 4 ft. punch top, full width,
auto-latch (122100)



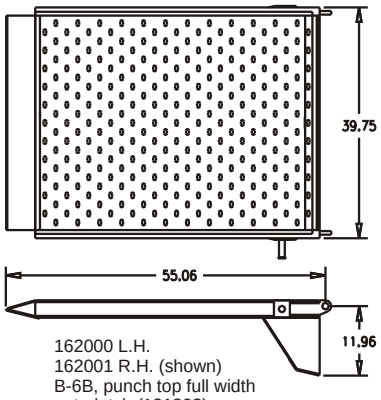

161900 L.H.
161901 R.H. (shown)
B-5P, 4 ft. wood top, auto-latch
(121265)



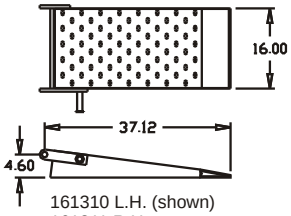

161340 L.H. (shown)
161341 R.H.
B-2.5TSL, full width
f.b. hold-up, punch top (123817)



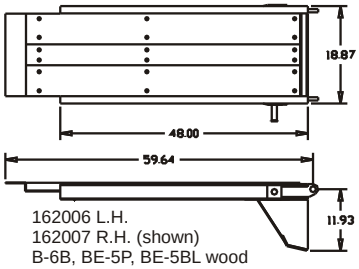

161570 L.H.
161571 R.H. (shown)
B-6B, mesh top, full width
auto-latch (121204)



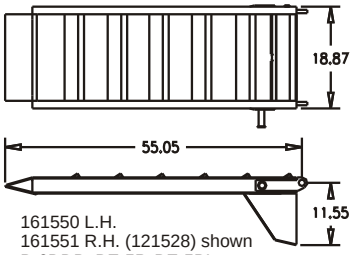

162000 L.H.
162001 R.H. (shown)
B-6B, punch top full width
auto-latch (121203)




161310 L.H. (shown)
161311 R.H.
B-2.5TSL, B-5TSL punch top
auto-latch (124129)

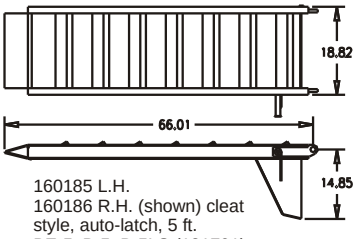



162006 L.H.
162007 R.H. (shown)
B-6B, BE-5P, BE-5BL wood
top, auto-latch (121200)

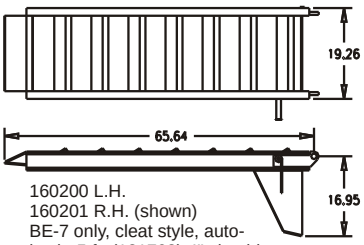



161550 L.H.
161551 R.H. (121528) shown
B-6DDB, BE-5P, BE-5BL
cleat style, auto-latch

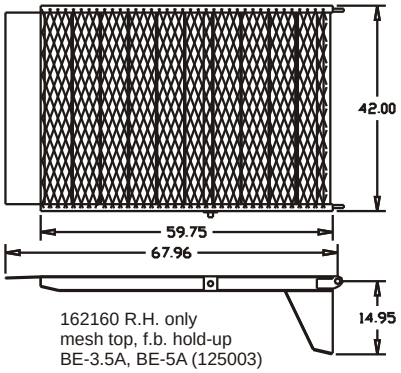
# Ramps



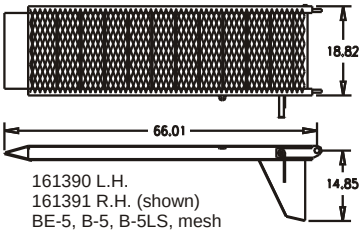

160185 L.H.
160186 R.H. (shown) cleat style, auto-latch, 5 ft.
BE-5, B-5, B-5LS (121701)



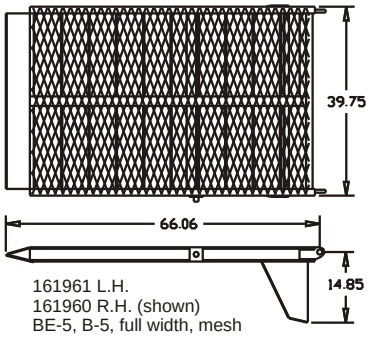

160200 L.H.
160201 R.H. (shown)
BE-7 only, cleat style, auto-latch, 5 ft. (121703) 4" ch. sides



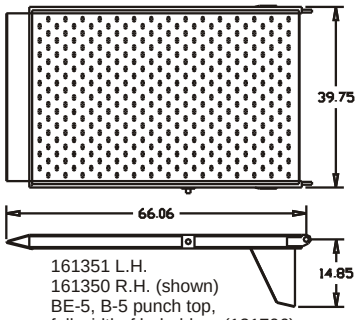

162160 R.H. only
mesh top, f.b. hold-up
BE-3.5A, BE-5A (125003)



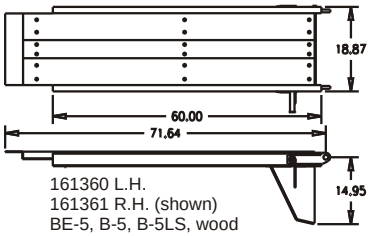

161390 L.H.
161391 R.H. (shown)
BE-5, B-5, B-5LS, mesh top, auto-latch (121707)



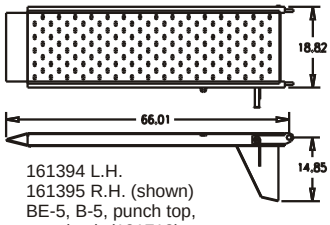

161961 L.H.
161960 R.H. (shown)
BE-5, B-5, full width, mesh top, f.b. hold-up (121704)



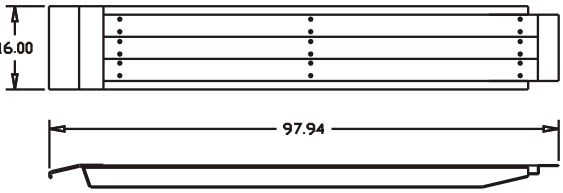

161351 L.H.
161350 R.H. (shown)
BE-5, B-5 punch top, full width, f.b. hold-up (121706)



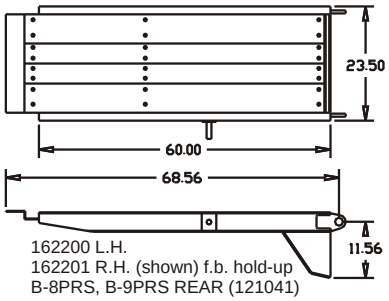

161360 L.H.
161361 R.H. (shown)
BE-5, B-5, B-5LS, wood top, auto-latch (121711)



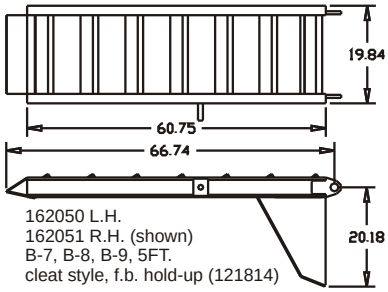

161394 L.H.
161395 R.H. (shown)
BE-5, B-5, punch top, auto-latch (121713)



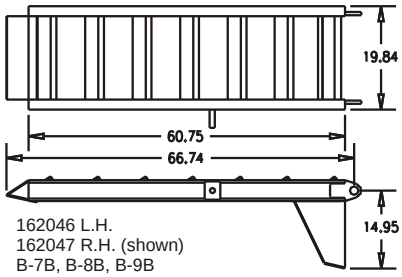

160108 SIDE RAMP, B-8PRS, B-9PRS (121038)



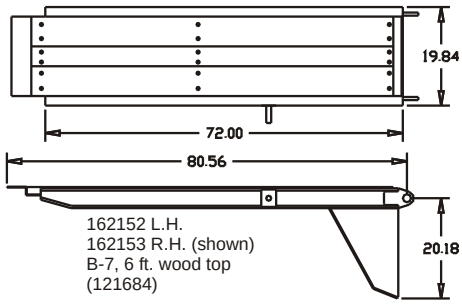

162200 L.H.
162201 R.H. (shown) f.b. hold-up
B-8PRS, B-9PRS REAR (121041)



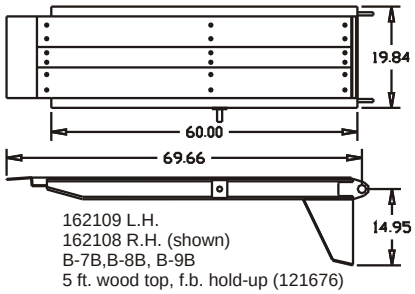

162050 L.H.
162051 R.H. (shown)
B-7, B-8, B-9, 5FT.
cleat style, f.b. hold-up (121814)



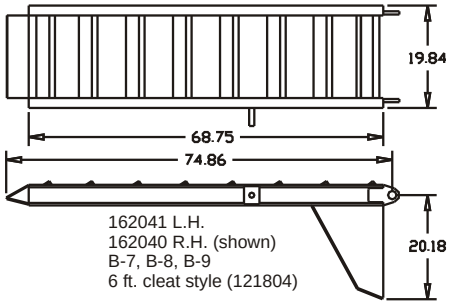

162046 L.H.
162047 R.H. (shown)
B-7B, B-8B, B-9B
5 ft. cleat style, f.b. hold-up (121812)




162152 L.H.
162153 R.H. (shown)
B-7, 6 ft. wood top
(121684)




162109 L.H.
162108 R.H. (shown)
B-7B,B-8B, B-9B
5 ft. wood top, f.b. hold-up (121676)

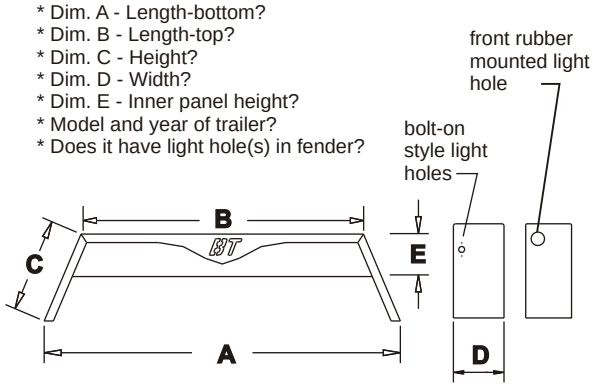


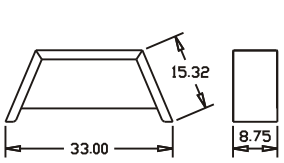

162041 L.H.
162040 R.H. (shown)
B-7, B-8, B-9
6 ft. cleat style (121804)

# Fenders and Light Boxes

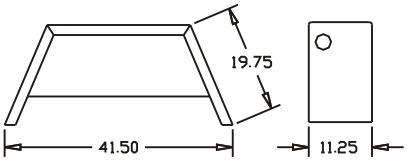
**Due to the several different styles & dimensions of fenders in use, we must have the following dimensions and information when replacement fenders are ordered.**

* Dim. A - Length-bottom?
* Dim. B - Length-top?
* Dim. C - Height?
* Dim. D - Width?
* Dim. E - Inner panel height?
* Model and year of trailer?
* Does it have light hole(s) in fender?

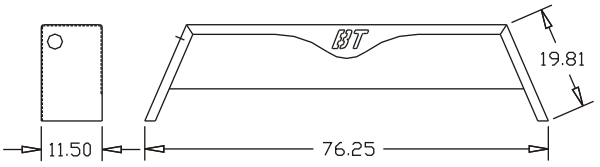


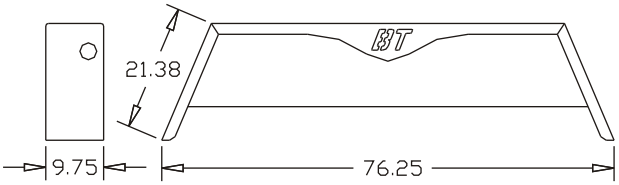

**p/n 060513, BE-1T**



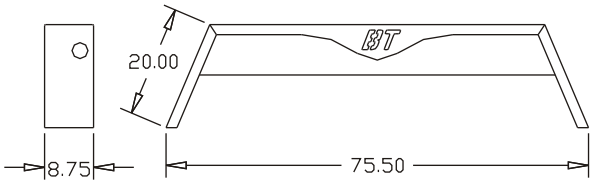

**p/n 062276RH, 062276LH B-1.75T, B-3.5T**



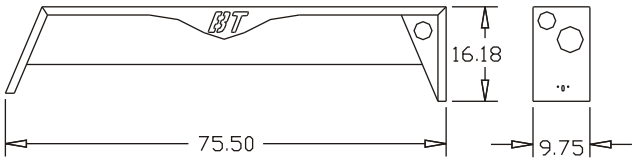

**P/n RH 063790, LH 063791**



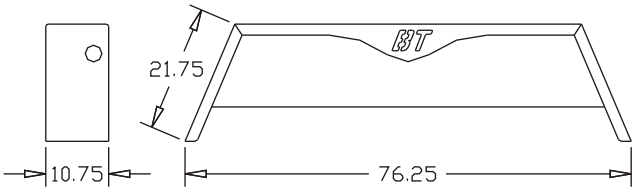

**P/n RH 063830, LH 063831, BE-3.5, BE-5, BE-6, BE-5BL, BE-6BL, B-5DD, B-6DD, BE-7**



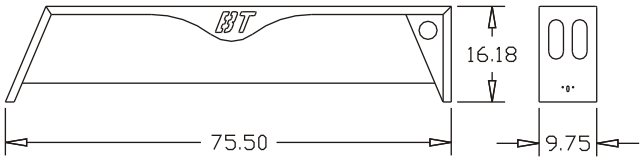

**P/n RH 063290, LH 063291 B-7, B7B**



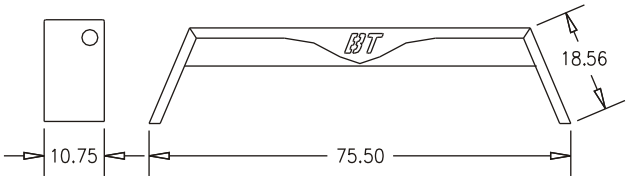

**P/n LH120750 l.h. (shown) RH 120752., B-5T, B-6T, B-7T**



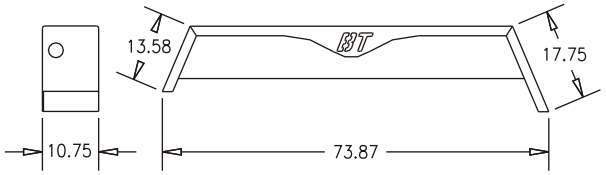

**P/n RH 062798, LH 062797 BE-5P spring axle only**



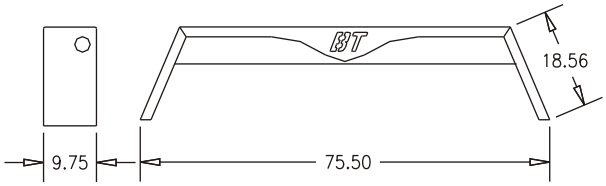

**P/n LH 120834 (shown) RH 120835, B-5T, B-6T, B-7T**




**P/n RH 064532, LH 064533,B-9DDB, low pro., 80” deck**




**P/n RH 063438, LH 063439, B-8PRS, B-9PRS, 80” deck**




**P/n RH 064530, LH 064531, B-8, B-8B, B-9, B-9B low pro. 82" deck**

# Fenders and Light Boxes

**120347B r.h.(shown)**
**120347A l.h., B-1.75T, B-2.5T**
**B-3.5P, B-5P**

**120263 r.h. (shown)**
**120262 l.h., B-7**

**120255B r.h. (shown)**
**120255A l.h., B-8**
**74" frame, 82" wide deck**

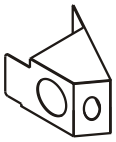
**120372B r.h. (shown)**
**120372A l.h. B-9 (no bvt)**

**120257B r.h. (shown)**
**120257A l.h., B-8B**
**74" frame, 82" wide deck**

**120823B r.h. (shown)**
**120823A l.h., B-9PRS**
**69" frame, 80" wide deck**

**120831B r.h. (shown)**
**120831A l.h., B-9PRS**
**69" frame, 82" wide deck**

**123952B r.h. (shown)**
**123952A l.h., BE-5BL, BE-6BL**



120762B r.h. (shown)
120762A l.h., B-6B

120285B r.h. (shown)
120285A l.h., B-7

120331B r.h. (shown)
120331A l.h., B-8
74" frame, 82" wide deck

120285B, r.h. (shown)
120285A, l.h., B-7

120331B, r.h. (shown)
120331A, l.h., B-8
74" frame, 82" wide deck

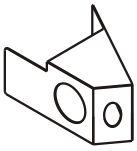
**120251B r.h. (shown)**
**120251A l.h., B-7B**

**120524B r.h. (shown)**
**120524A l.h., B-6B**

**120526B r.h. (shown)**
**120526A l.h., B-9B**

**120822B r.h. (shown)**
**120822A l.h., B-8PRS**
**74" frame, 80" wide deck**

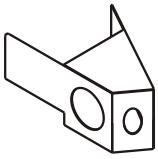
**120474B r.h. (shown)**
**120474A l.h., B-9B**
**69" frame, 82" wide deck**



120764B r.h. (shown)
120764A l.h., B-9B
69" frame, 80" wide deck

120770B r.h. (shown)
120770A l.h., B-7B

120766B r.h. (shown)
120766A l.h., B-8B
74" frame, 82" wide deck

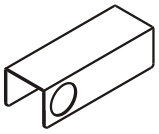


120759B r.h.(shown)
120759A l.h., B-8PRS, B-9PRS
69" frame, 80" wide deck

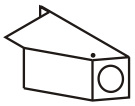
**120476B r.h. (shown)**
**120476A l.h., BE-5P**

**061953, side/front light**
**bracket, for 6" beam**

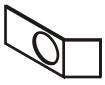
**060883, front marker**
**light bracket, B-1T, BE-5P**



**062956, B-5T, B-6T,**
**B-7T, specify l.h. or r.h.**
**side light bracket**



**120760B, r.h. (shown)**
**120760A, l.h., BE-5,B-5**
**marker light**



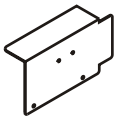
**060482, side/front light**
**bracket, B-1.75T, B-2.5T**

060446, side/front light
bracket, for 10" beam

**062032, side/front light**
**bracket, for 10" beam**
**2 bends**

060880, rear light
bracket, old style,
BE-5P

060881, rear light
bracket with square
hole, B-1T, specify
l.h. or r.h.



060876, rear light
bracket, specify l.h.
or r.h.

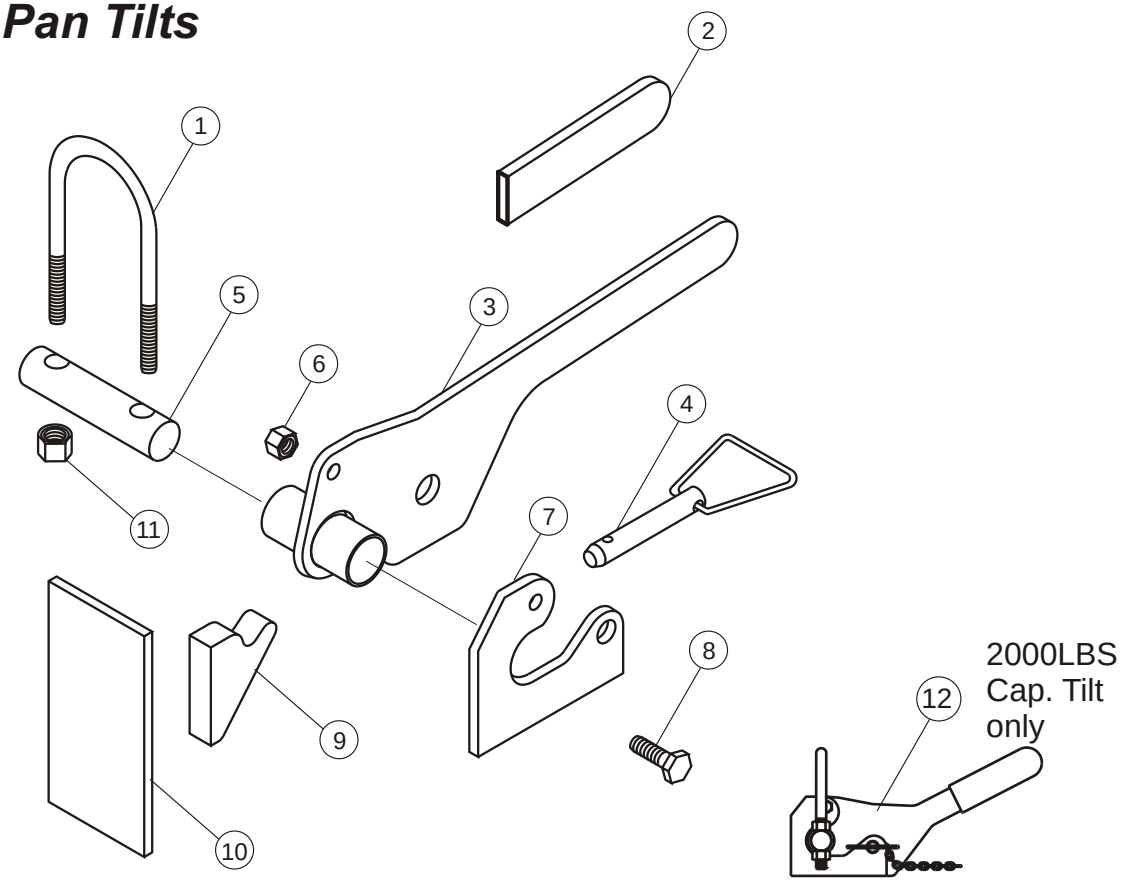
# SECTION 6

# Misc. Parts


| | |
|---|---|
| Deck Latch | 6.1-6.2 |
| Deck Cushion Cylinder and Pivot Points | 6.3-6.4 |
| Winch Mount | 6.5 |
| Bucket Stop | 6.6 |
| Misc. Parts | 6.7 |

# Deck Latching System

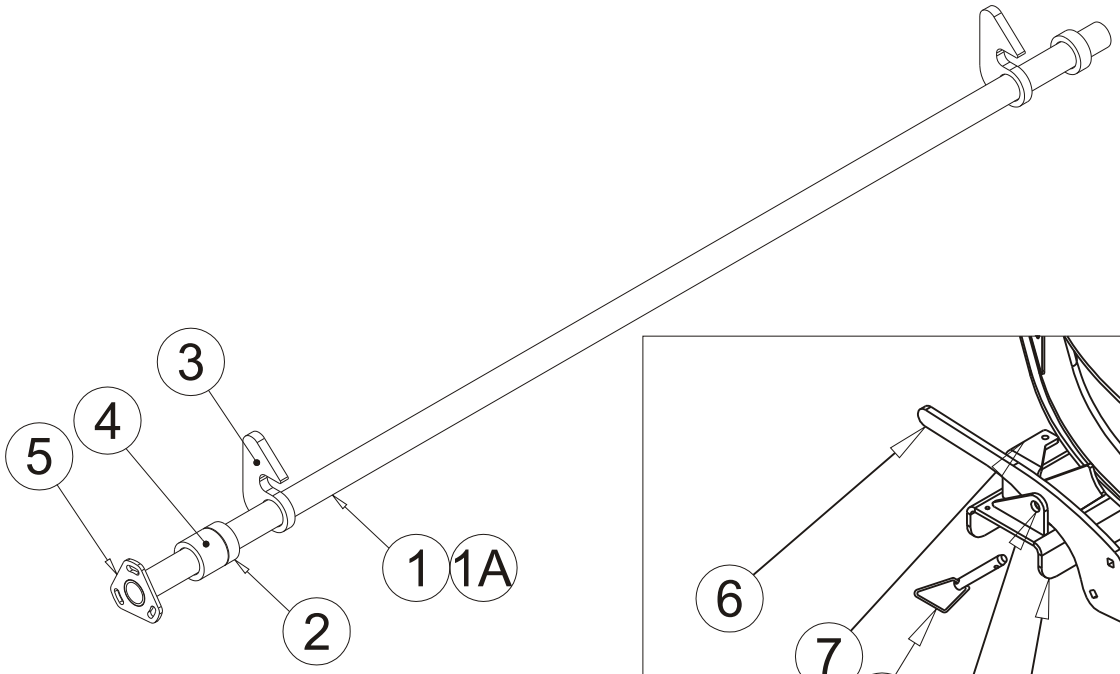
## *For Models: Pan Tilts*

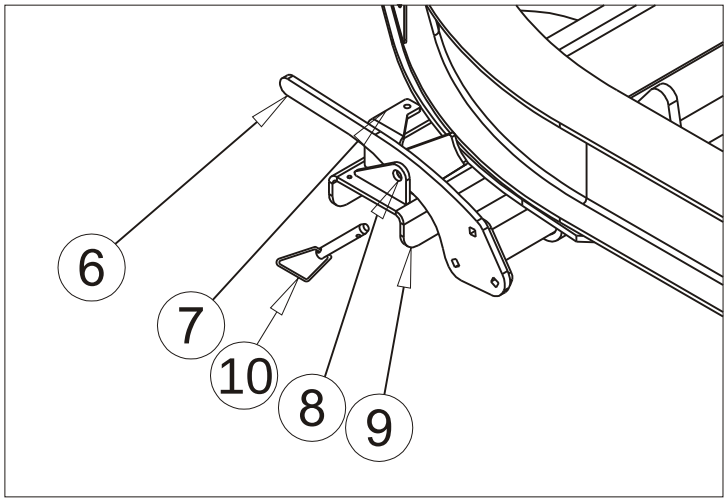



| Item | Part # | Description |
|---|---|---|
| | 16-0004 | complete latch assembly, less hook and bar |
| | | |
| 1 | 36-0305 | u-bolt |
| 2 | 37-0232 | handle grip |
| 3 | 12-0066 | latch handle |
| 4 | 37-0230 | pin w/ chain |
| 5 | 07-0024 | swivel rod |
| 6 | 36-0002 | 3/8" ny-lock nut |
| 7 | 06-0216 | latch mount (quantity 2/assembly) |
| 8 | 36-0004 | 3/8" x 1 1/4", gr. 5 bolt |
| 9 | 06-0236 | latch hook |
| 10 | 05-0140 | bangboard bar |
| 11 | 36-0021 | 1/2" ny-lock nut (fine thread) |
| | | |
| 12 | 16-0005 | complete latch assembly, less hook and bar, slanted handle (2000LBS Cap. Tilt) |

# Deck Latching System - Small Tilt

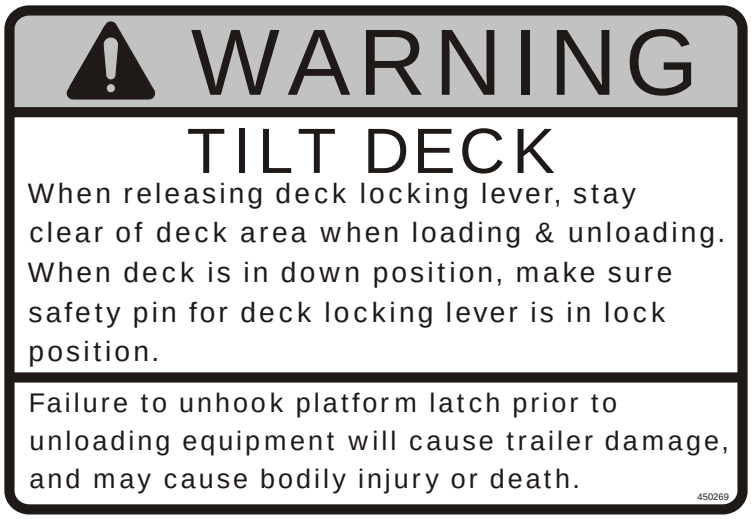
**Used on these models: Drop Deck Tilts**



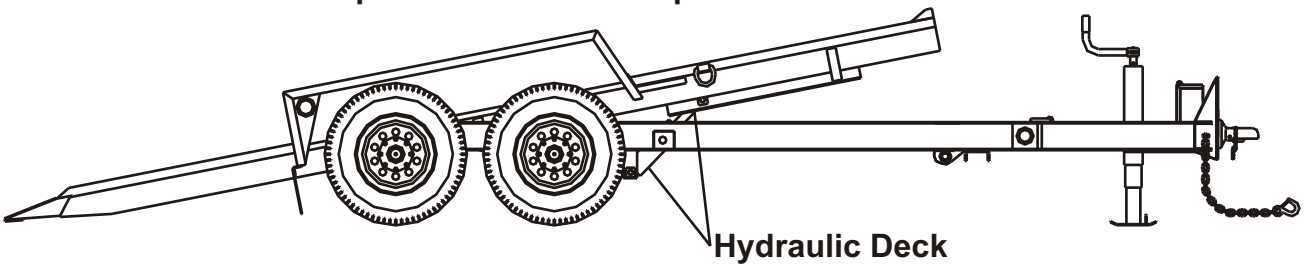

**** STANDARD DECK LATCH NON-STATIONARY AND STATIONARY DECKS AS OF 02/06***

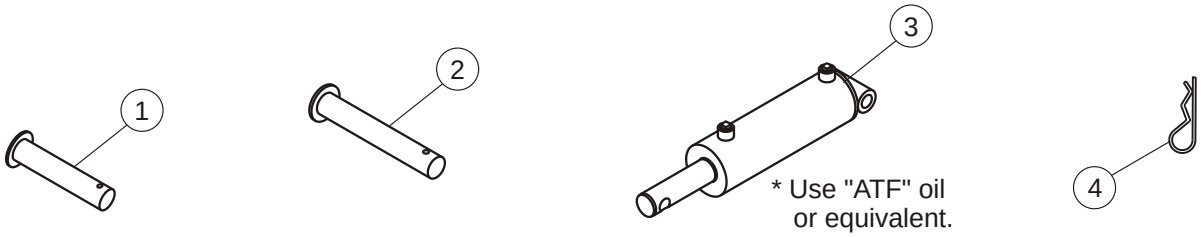
| Item | Part # | Description |
|---|---|---|
| 1 | 08-1246 | Latch tube |
| 1A | 08-1303 | Latch tube **For B-8T Only** |
| 2 | 08-1244 | Shaft lock collar |
| 3 | 06-6500 | Latch |
| 4 | 08-1245 | Latch pivot tube |
| 5 | 06-6499 | Latch adjustment plate |
| 6 | 06-6498 | Latch Handle |
| 7 | 06-1796 | Latch lock spring/keeper |
| 8 | 06-0993 | Latch lock |
| 9 | 06-1029 | Latch handle mount |
| 10 | 37-0230 | Lock pin |
| | | |
| | | |


WARNING
TILT DECK
When releasing deck locking lever, stay clear of deck area when loading & unloading. When deck is in down position, make sure safety pin for deck locking lever is in lock position.
Failure to unhook platform latch prior to unloading equipment will cause trailer damage, and may cause bodily injury or death.
450269

# Deck Cushion Cylinder and Pivot Pins

**Used on these models: Drop Deck >5000LBS Cap. Add-A-Deck Tilts**

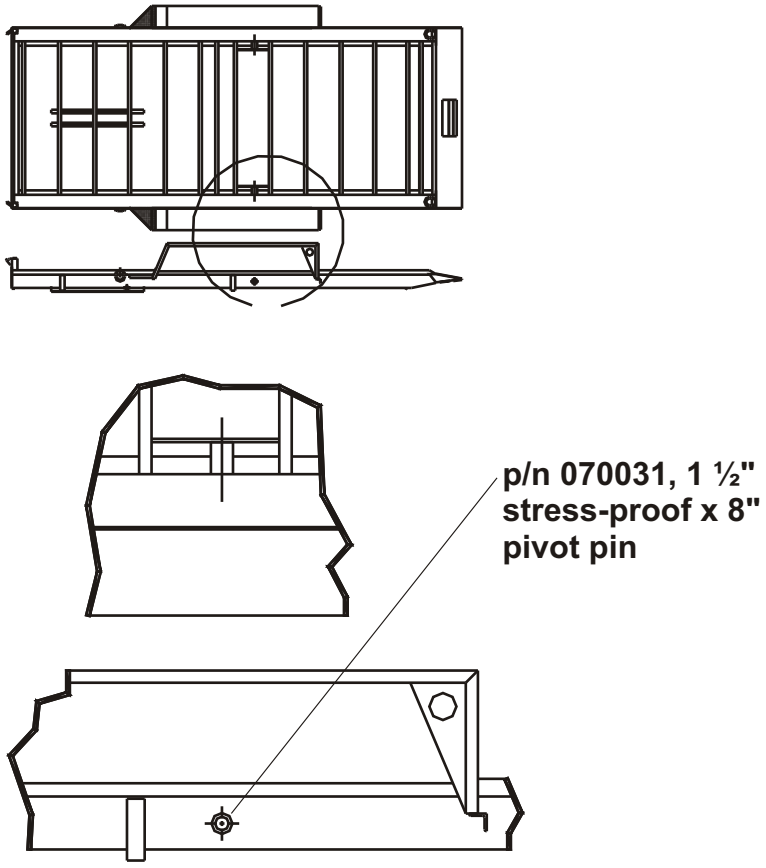



| Item | Part # | Description |
|---|---|---|
| 1 | 12-0101 | cylinder pin, 4" |
| 2 | 12-0102 | cylinder pin, 6 1/2" |
| 3 | 37-0300 | cushion cylinder, 3 1/2 x 8 |
| 4 | 37-0020 | lynch pin |
| | 37-0266 | seal kit |

# Pivot Pins

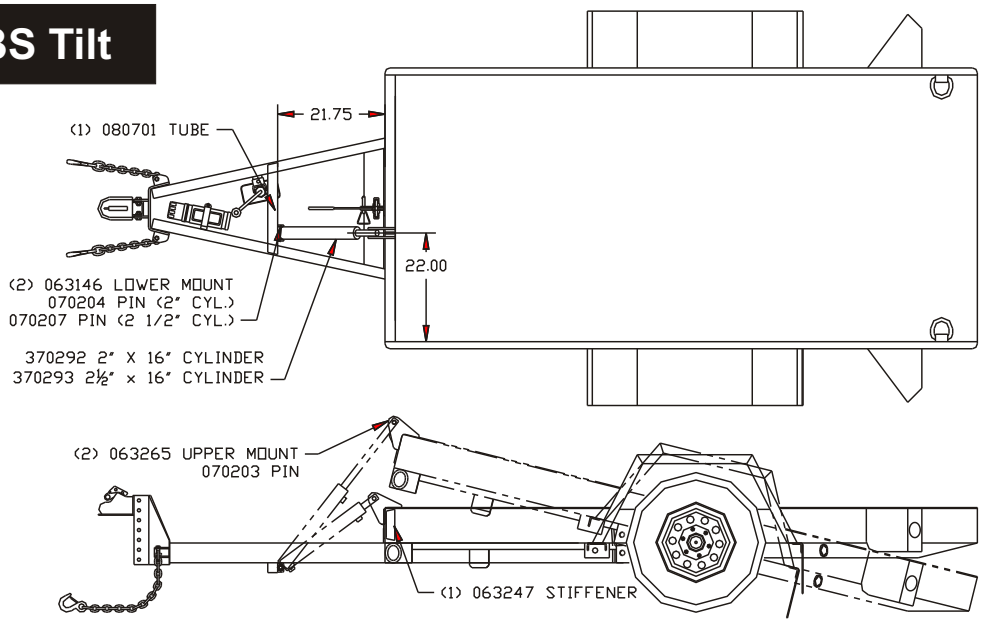
**Used on these models: Drop Deck >5000LBS Cap. Add-A-Deck Tilts**



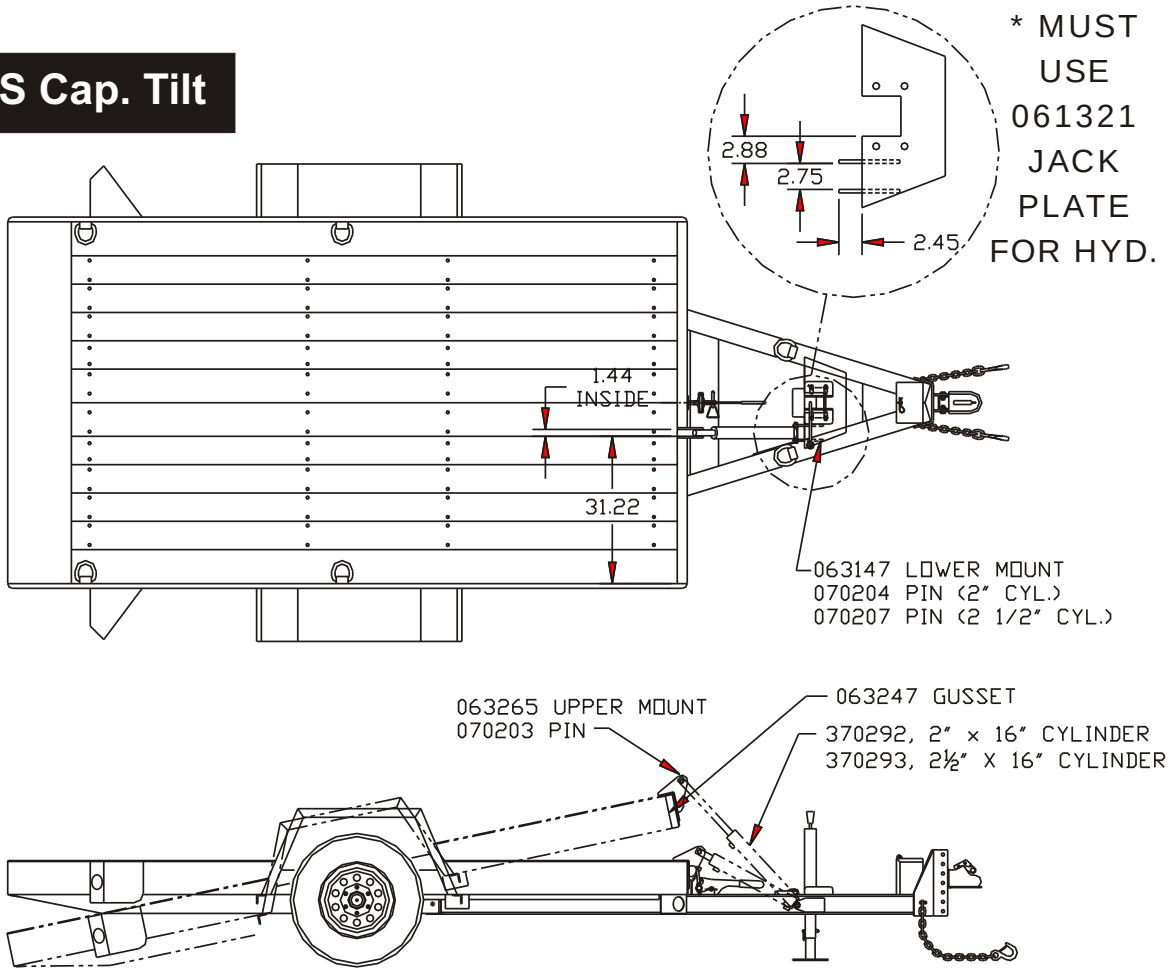
# Deck Cushion Cylinder

**Used on these models: 3000-5000 LBS Cap. Tilts**

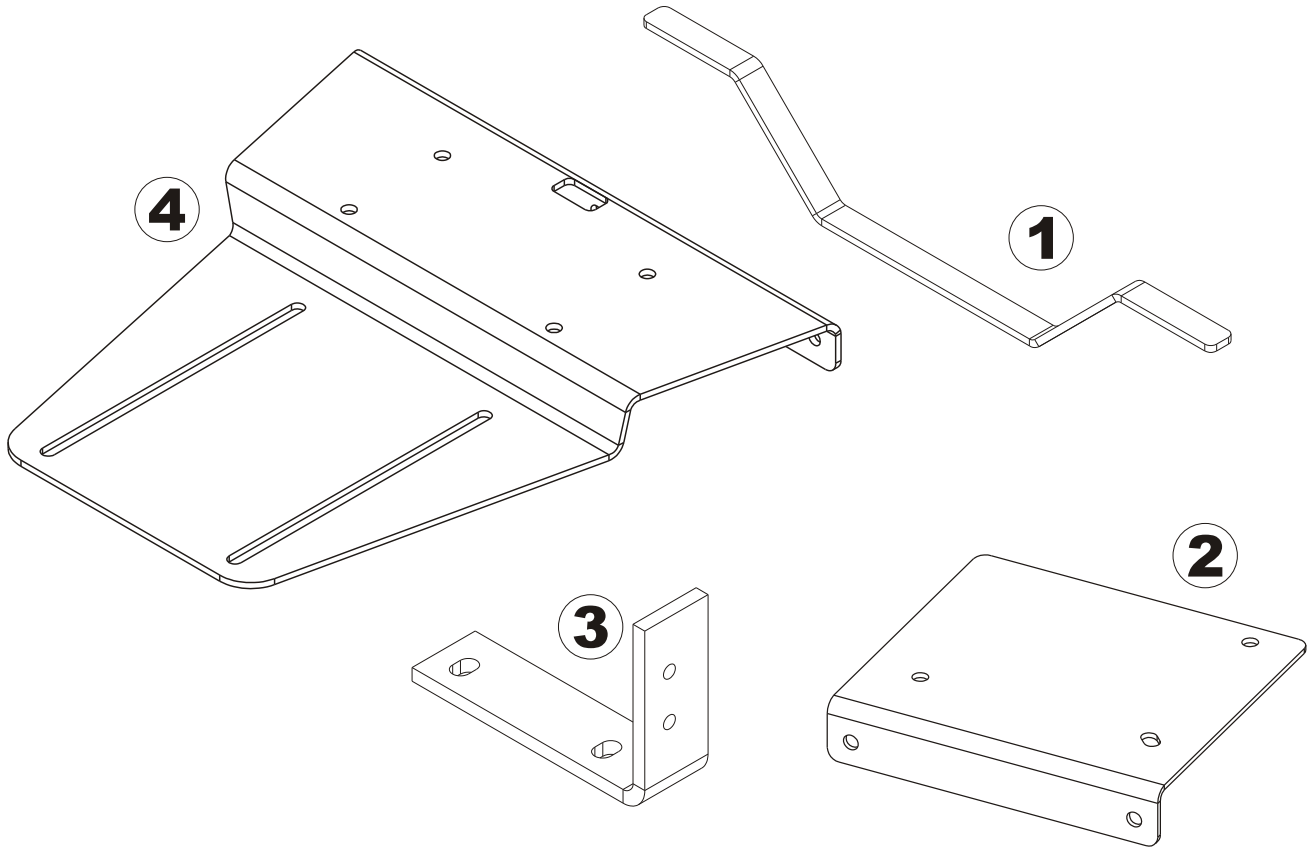
## 3000 LBS Tilt




## 5000 LBS Cap. Tilt



# Winch Mount




| Item | Part # | Description |
|---|---|---|
| | | |
| | | |
| | 37-1986 | 8,000 lbs. capacity winch |
| | | |
| 1 | 05-2458 | Winch cable holder |
| 2 | 06-4430 | Control box mount |
| 3 | 05-0898 | Cable guides |
| 4 | 06-7992 | Winch Mount |
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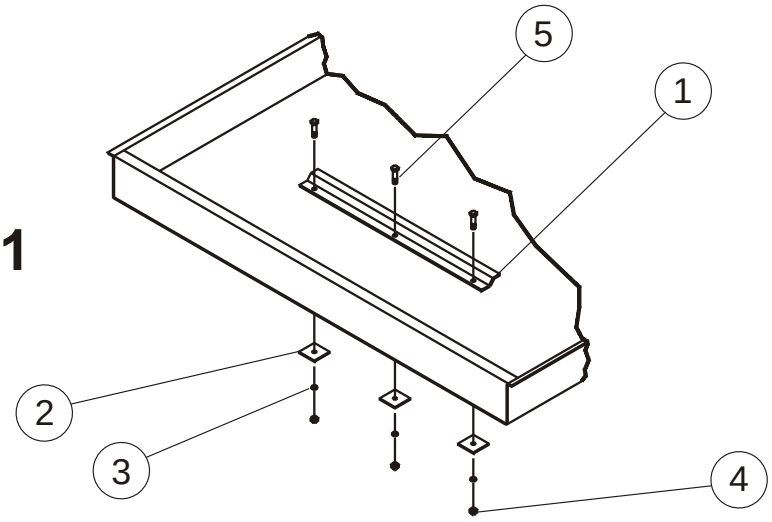
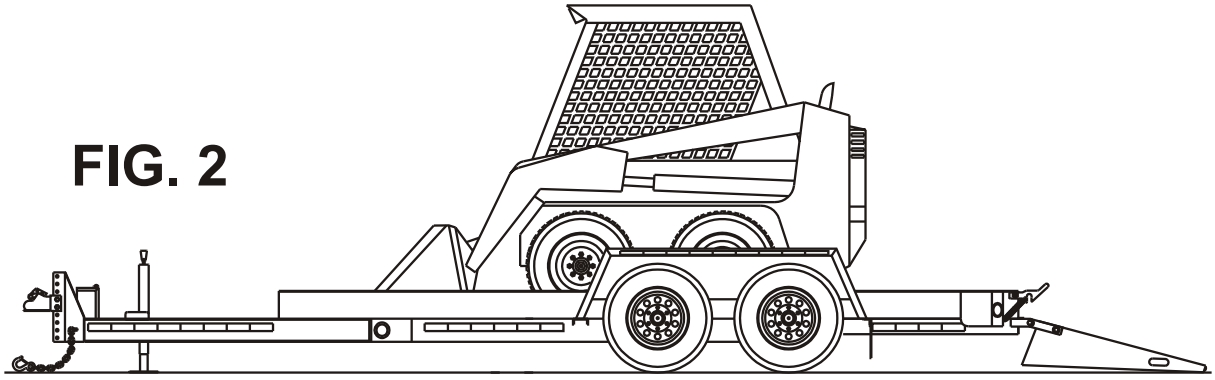
# Bucket Stop

**FIG. 1**




The bucket stop is designed to keep the weight of a skid steer loader spread evenly on the axles of our 14'-0" or longer utility trailers. 70% of a skid steer's weight is on the rear tires. The skid steer should be loaded where the rear tires are between the axles on the trailer as shown in **FIG. 2.** After loading, mark out the location of the bucket on the deck of the trailer, lay the bucket stop centered on the deck directly in front of the bucket and mark the hole locations. Drill (3) 17/32" dia. holes and bolt bucket stop to deck (**FIG. 1.**)

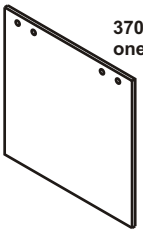
**FIG. 2**



| Item | Part # | Description |
|---|---|---|
| | 37-1001 | bucket stop kit |
| | | |
| 1 | 05-0216 | bucket stop bar |
| 2 | 05-0218 | bucket stop washer |
| 3 | 36-0018 | 1/2" lock washer |
| 4 | 36-0008 | 1/2" nut |
| 5 | 36-0019 | 1/2" x 1 1/2" bolt |

# Miscellaneous Parts

370003, 3/8" x 40", gr. 43 safety chain, 12,000 lb. capacity & smaller
370014, 3/8" x 40", gr. 70 safety chain, 14,000 lb. - 20,000 lb. capacity
370002, ½"x 40", gr. 70 safety chain, 24,000 lb. - 30,000 lb. capacity
370013, ½"x 40", gr. 80 safety chain, 40,000 lb. capacity models
370006, 5/8" x 40", gr. 80 safety chain, 50,000 lb. capacity models



370812, mud flaps, generic, one pair, 10" x 10"

061379
"C-10" tie down

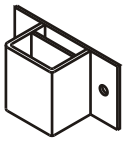
370008, 3/4" D-ring with clip

370009, 1" D-ring with clip (370011 D-ring only)

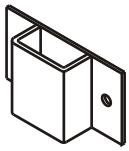
050221, stake pocket, 1 ½ x 3 ½ stakes, 4" deep, 1/4" matl, see 050222 for 3/16" matl

123995, stake pocket, C-10

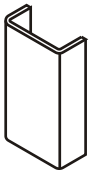
050482, stake pocket, C-2T



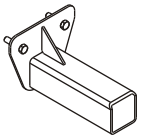
123998, stake pocket, bolt-on for T-10P sides



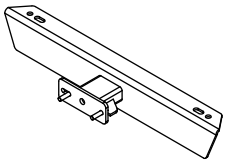
123999, stake pocket, bolt-on for T-10P headboard



060900, stake pocket, 7" T-10P

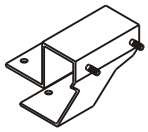


124050, spare tire mount T-14DD



120246 spare tire mount, T-10T
120247 spare tire mount, T-12T
120248 spare tire mount, T-14T

120253, spare tire mount, C-8, C-10 6 bolt (replaces 060704)



123807, C-8, C-10 8 bolt

160205 spare tire mount, T-10P, 6 bolt (ref. 060431)

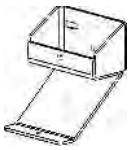
160210 8 bolt (ref. 060429)

160215, spare tire mount, 6 bolt (ref. 060432) 3 x 2 sides
060385 - 3 x 3 sides

160220, 8 bolt (ref. 060433)

060425 with 235 tires, 6 bolt

124034 spare tire mount T-14DDB



124036, spare tire mount, BL, bolt on style

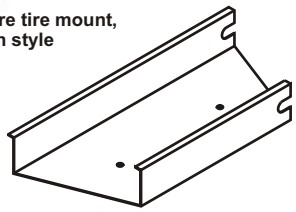
124042, spare tire mount, C-10, bolt on style

160225, spare tire mount, T-14DD, 5/8" studs only (ref. 060457)

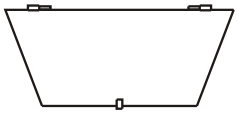
160235, spare tire mount, T-16DD 5/8" studs only, (ref. 060481)

123975, tool box hinge

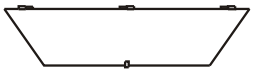
123980, tool box hinge



030300, tool box bottom only, T-10P



123977, tool box lid, bolt on style, T-10P use with hinge 123975

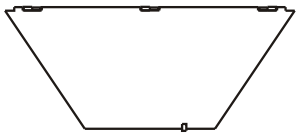


126263, tool box lid, bolt on style, C-10, use with hinge 123975

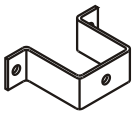
123971, tool box lid, bolt on style, T-10T, T-12T, T-14T, use with hinge 123975 (pre-8/2/04 use lid 123978)

124173, tool box lid, bolt on style, T-16T, use with hinge 123975

123969, tool box lid, bolt on style, T-16PRS, T-18PRS, use with hinge 123975

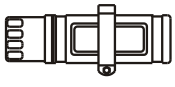


123979, tool box lid, bolt on style, T-14DD
123982, tool box lid, bolt on style, T-16DD
123984, tool box lid, bolt on style, T-18DDB
(all 3, use with hinge 123980)



060737, hubodometer mounting bracket, 6 bolt hubs only

375011, hubodometer



376072, registration holder

* Not shown: 360025, 5/16" x 2 1/4" torque decking screw, 360216 - 3" screw

SECTION 7

# Decals


Decals 7.1-7.3

Decal Kits 7.4


7

# Decals, Warnings and Cautions

## ⚠ WARNING

This trailer with ELECTRIC BRAKES requires an electric brake controller in tow vehicle.

Load must be secured according to D.O.T. standards.
(Follow DOT Federal Motor Carrier Safety Regulations §392.9, §393.100 and §393.102.)

Trailer tongue is rated to transfer 20-25% of gross weight to achieve maximum payload capacity and proper towing. Check hitch bolts frequently. Use only grade 8 bolts and nuts on hitch.

KEEP THEM TIGHT!

Trailer must be towed level, or slightly higher (1" to 2") in front.

453220B

## ⚠ WARNING

This trailer with HYDRAULIC SURGE BRAKES may not comply with all Federal D.O.T. requirements.

Load must be secured according to D.O.T. standards.
(Follow DOT Federal Motor Carrier Safety Regulations §392.9, §393.100 and §393.102.)

Trailer tongue is rated to transfer 20-25% of gross weight to achieve maximum payload capacity and proper towing. Check hitch bolts frequently. Use only grade 8 bolts and nuts on hitch.

KEEP THEM TIGHT!

Trailer must be towed level, or slightly higher (1" to 2") in front.

453220A

## ⚠ WARNING

### TILT DECK

When releasing deck locking lever, stay clear of deck area when loading & unloading. When deck is in down position, make sure safety pin for deck locking lever is in lock position.

Failure to unhook platform latch prior to unloading equipment will cause trailer damage, and may cause bodily injury or death.

450269

## ⚠ WARNING

For proper performance, all new axles should have the following checked at the specific intervals:

Wheel Nut Torque:

Upon delivery, at 10, 25 and 50 miles and weekly thereafter. KEEP THEM TIGHT!

Brake Adjustment:

At 200 miles and 3,000 miles and every 3,000 miles thereafter.

Tire Pressure:

Upon delivery and per tire manufacturer's requirements.

450009A

## ⚠ WARNING

### OVERLOAD HAZARD

**Risk of death due to loss of control**

**Never exceed gross vehicle weight rating (GVWR)**

BEFORE LOADING TRAILER THE FIRST TIME, YOU MUST VERIFY ITS CARGO CAPACITY

1. You must weigh the empty trailer
2. subtract the weight of the empty trailer from the maximum loaded trailer weight (GVWR) (see VIN/Serial No. Tag)
3. DO NOT LOAD TRAILER BEYOND CAPACITY

MAXIMUM CARGO WEIGHT
+ PLUS
WEIGHT OF EMPTY TRAILER = (GVWR)

453323

# Decals, Warnings and Cautions

p/n: 452820

**DANGER**

SERIOUS INJURY AND/OR PROPERTY DAMAGE CAN RESULT IF THIS VEHICLE IS TOWED BEFORE FAMILIARIZING YOURSELF WITH THE MANUFACTURER'S OPERATING INSTRUCTIONS AND CAUTIONS LISTED TO THE RIGHT

**CAUTION** BEFORE TOWING THIS TRAILER CHECK THAT:

- COUPLER HITCH AND TRAILER BALL ARE THE SAME SIZE
- COUPLER IS LATCHED
- SAFETY CHAINS ARE CRISSCROSSED UNDER TONGUE AND ATTACHED TO TOW VEHICLE
- ALL TRAILER LIGHTING IS WORKING CORRECTLY
- LOAD IS SECURED TO TRAILER FRONT AND REAR
- TONGUE JACK (IF SO EQUIPPED) IS RETRACTED
- TILT PIN IS LATCHED
- WHEEL LUG BOLTS ARE PROPERLY TIGHTENED
- TIRES ARE INFLATED TO PRESSURE INDICATED ON TIRE
- TRAILER BRAKES ARE PROPERLY ADJUSTED AND BREAK-AWAY DEVICE IS ATTACHED TO TOW VEHICLE
- LOAD IS WITHIN TRAILER CAPACITY AND DISTRIBUTED PROPERLY TO MAINTAIN PROPER TONGUE WEIGHT

**WARNING**

YOU ARE REQUIRED TO COMPLY WITH LOCAL AND STATE REQUIREMENTS REGARDING BRAKES, LICENSING AND AN ADDITIONAL EQUIPMENT THAT MAY BE NECESSARY. CONTACT YOUR STATE MOTOR VEHICLE DEPARTMENT FOR MORE INFORMATION. ALSO REFER TO DOT FEDERAL MOTOR CARRIER SAFETY REGULATIONS §392.9, §393.100 AND §393.102. 452820

**CAUTION**

KEEP BATTERY CHARGED!

To ensure proper break-away protection, check battery regularly for proper charge.

450280

p/n: 450005

p/n: 450014

DEXTER AXLE

This trailer equipped with

**E-Z Lube**

Use only **LITHIUM COMPLEX** NLGI CONSISTENCY #2 GREASE
Other types of grease may not be compatible.
These hubs and bearing have been lubricated at the factory. The bearings can ve periodically lubericated without removing hubs. Simply remove the rubber plug, attach a grease gun to the grease fitting, apply grease until new grease come out around the slotted spindle nut. Wipe off any excess and reinstall the rubber plug.

**CAUTION**

Pallet forks must be secured to trailer while trailer is in motion.

450305

**CAUTION**

BREAK-AWAY SWITCH IS FOR EMERGENCY USE ONLY!

To check:
1. Attach trailer to tow vehicle coupler
*Do NOT connect wiring recepticle to tow vehicle
2. Remove break-away plug from switch box.
3. Pull trailer forward slightly (looking for trailer brakes to be locked)
4. Promptly replace plug into switch box.
5. Attach break-away cable to tow vehicle for transport

Do not remove break-away plug from switch box for use as a parking brake or while wiring recepticle is pluged into tow vehicle ( severe wiring damage may be

450291

p/n: 450008

p/n: 450052 - 1" red/white reflectorized tape

p/n: 450050 - 2" red/white reflectorized tape

# Decals, Warnings and Cautions

P/n: 450036A- 1”x 6”, 450037A- 5”x 26”

Big Tow TRAILERS

p/n: 455000

866-397-8481
bigtowtrailers.com

p/n: 450029

## ⚠ DANGER

**AVOID SERIOUS INJURY OR DEATH**

- Ramps can cause serious injury or death
- Stay clear of DANGER AREA when raising and lowering ramps
- Stand at side of trailer when in operation or in use
- Read operation and maintenance manual for further instructions

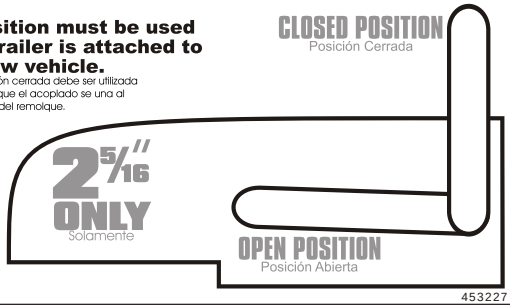
450029

p/n: 453227

## ⚠ DANGER

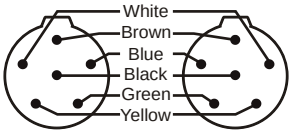
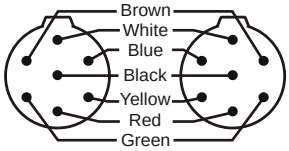
**Ball Coupler Operation**

**Closed position must be used whenever trailer is attached to tow vehicle.**
La posición cerrada debe ser utilizada siempre que el acoplado se una al vehiculo del remolque.




453227

p/n: 451407

| 6 Pole | | 7 Pole | |
|---|---|---|---|
|  | |  | |
| **Trailer Plug p/n 39-5005** | **Truck Receptacle p/n 39-5006** | **Truck Receptacle p/n 39-9025** | **Trailer Plug p/n 39-9023** |
| white | ground | brown | tail, clearance, side marker and license plate lights |
| brown | tail lights | white | ground |
| black | accessory | black | accessory |
| blue | brakes | blue | electric brakes |
| green | right turn | yellow | left turn |
| yellow | left turn | red | stop lights |
| | | green | right turn |

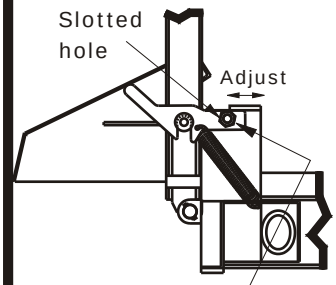


**NOTE: The contacts are identified by looking into the open end of either the truck receptacle or trailer plug. 6 & 7 pole.**

451407

p/n: 452705

## ATTENTION:



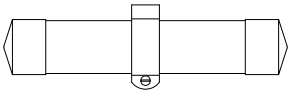

To adjust ramps to stand in the transport position, loosen nut and bolt in slotted hole, move ramp to desired position, and tighten nut and bolt.

452705

p/n: 452925

## ATTENTION:

Registration Holder



Parts and Service Manual enclosed. To receive an additional 6 months warranty of MAIN FRAME only, return your warranty registration within 14 days. See dealer.

452925

p/n: 451240

## ATTENTION

A "green brake" is an ingrained, unburnished brake. Normal manufacturing tolerances dictate that there is a break-in period required after which the lining will seat into a perfect concentric situation. During this break-in period, the user must be aware that additional brake adjustments will be mandatory to

451240

# Decals, Warnings and Cautions
# Decal Kits

**For complete decal kits: please specify trailer model, deck length and paint color.**

| Part number | Model |
|---|---|
| 451749 | B-2.5TSL |
| 451750 | BE-3.5 |
| 451751 | BE-5P |
| 451752 | BE-5 |
| 451754 | BE-6 |
| 451756 | BE-5A |
| 451758 | BE-7 |
| 451760 | BE-5BL |
| 451762 | BE-6BL |
| 451650 | B-3.5P |
| 451654 | B-5P |
| 451670 | B-5 |
| 451675 | B-6 |
| 451710 | B-7 |
| 451691 | B-8 |
| 451685 | B-7B |
| 451695 | B-9B |
| 451712 | B-8PRS |
| 451713 | B-9PRS |
| 451697 | B-1T |
| 451698 | B-1.75T |
| 451699 | B-2.5T |
| 451700 | B-5T |
| 451705 | B-6T |
| 451710 | B-7T |
| 451765 | B-5LS |
| 451766 | B-6LS |

*Portions of this manual were used with the expressed authority of Dexter Axle, but Dexter Axle is not responsible for the accuracy of the information contained herein.*

## Big Tow Quality, Big Tow Dependability

**Employee Owned!**
**American Pride!**
**American Made!**

**Big Tow trailers, U.S. Hwy 12, Litchfield, MN 55355**
**866-397-8481 Parts Dept. Fax: 320-693-5703**
**www.bigtowtrailers.com**

Big Tow Trailers has a complete line of trailers; small pans and tilts, drop deck trailers, deck over models, large tilts and detachable gooseneck trailers. See your Big Tow Trailers dealer or visit the website for more information.

Manufacturer reserves the right to modify, without notice, specific designs and specifications as deemed advisable on the trailers described herein without obligation in regards to trailers previously sold. The manufacturer also reserves the right to discontinue any model or models without obligation in regards to trailers previously sold. Written warranty covers each trailer. No other warranty expressed or implied is made. Warranty on tires and brakes through original manufacturer. All dimensions approximate.

47-2501:10/2007